



# MPW Series Manual Motor Protectors



**MPW40-3-U001**

## Overview

The WEG MPW Series Manual Motor Protectors provide a very compact solution for operation and protection in motor control applications. The NEC requires four functions to be considered a combination motor starter: Motor Disconnect, Branch Circuit

Protection, Motor Controller and Motor Overload Protection. The WEG MPW meets all of these requirements, as well as the requirements of UL for Self-Protected Motor Controllers to be used in Type-E & F applications. With worldwide approvals, the WEG MPW can be used in a variety of applications all over the globe.

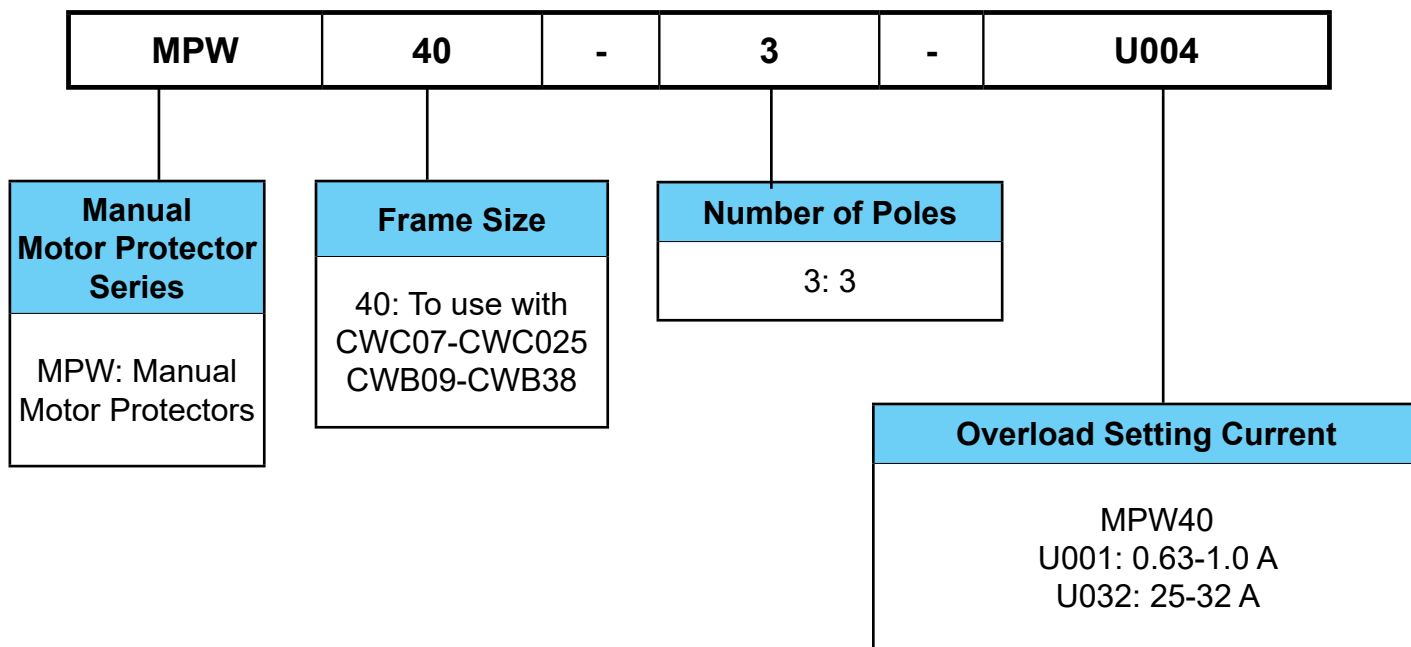
## Features

- High short-circuit interrupting ratings (up to 65kA @480V)
- Phase-loss sensitivity protection
- UL Type-E self-protected combination starter
- Suitable for motor disconnect applications
- Group motor installations (per NEC Article 430)
- Wide variety of accessories
- Rated for DC applications



UL File No. E172121

## MPW Manual Motor Protectors Catalog Number Sequence



For more details refer to selection table for each frame size

Table intended as reference only and not to create part numbers.



# MPW Series Manual Motor Protectors



**MPW40-3-U001**

## MPW40

- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 50kA@480VAC (25kA@600VAC)
- Fixed short-circuit release  $13 \times I_U$
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

\* When associated with line side terminal LST25 and trip indicator TSB

## MPW Series Manual Motor Protectors Selection Guide

| Part Number                  | Price   | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Ratings for Group Installation |      | Dimensional Drawing |
|------------------------------|---------|-----------------------|-------|-------------|-------|-------|-------|---------------------|--|------|---------------------|
|                              |         | Single-Phase          |       | Three-Phase |       |       |       |                     | 480V   | 600V |                     |
|                              |         | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  |                     |  |      |                     |
| <a href="#">MPW40-3-U001</a> | \$54.00 | –                     | –     | –           | –     | 1/2   | 1/2   | 0.63 - 1.0          | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D016</a> | \$54.00 | –                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D025</a> | \$54.00 | –                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U004</a> | \$54.00 | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D063</a> | \$54.00 | –                     | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U010</a> | \$54.00 | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U016</a> | \$59.00 | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U020</a> | \$65.00 | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U025</a> | \$77.00 | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U032</a> | \$82.00 | –                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 42kA   | 25kA | <a href="#">PDF</a> |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.



# MPW Series Manual Motor Protectors

**CLT32MPW40****MPW40-3-U001**

## MPW40 With Current Limiter

- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 100kA@480VAC (50kA@600VAC)
- Fixed short-circuit release  $13 \times I_U$
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)
- MPW motor protectors and [CLT32MPW40](#) current limiter are ordered separately

\* When associated with line side terminal LST25 and trip indicator TSB

### MPW Series CLT32MPW40 Current Limiter Selection Guide

| Current Limiter Part Number | Price   | Dimensional Drawing | Use With MPW Motor Protector Part Number | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Ratings for Group Installation |      |
|-----------------------------|---------|---------------------|--|-----------------------|-------|-------------|-------|-------|-------|---------------------|--|------|
|                             |         |                     |  | Single-Phase          |       | Three-Phase |       |       |       |                     | 480V   | 600V |
|                             |         |                     |  | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  |                     |  |      |
| <a href="#">CLT32MPW40</a>  | \$45.00 | PDF                 | <a href="#">MPW40-3-U001</a>             | -                     | -     | -           | -     | 1/2   | 1/2   | 0.63 - 1.0          | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-D016</a>             | -                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-D025</a>             | -                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-U004</a>             | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-D063</a>             | 1/4                   | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-U010</a>             | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-U016</a>             | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-U020</a>             | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-U025</a>             | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 100kA  | 50kA |
|                             |         |                     | <a href="#">MPW40-3-U032</a>             | -                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 100kA  | 50kA |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.



# MPW Series Manual Motor Protectors

## Accessories

| Accessories for MPW Series Manual Motor Protectors – Selection Guide |         |   |                            |
|--|---------|---|----------------------------|
| Part Number  | Price   | Description   | Dimensional Drawing        |
| <b>Auxiliary Contact Blocks</b>                                      |         |   |                            |
| <a href="#"><u>ACBF-11</u></a>                                       | \$8.25  | Field installable auxiliary contact, front mount, (1) N.O./ (1) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.               | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ACBS-11</u></a>                                       | \$9.00  | Field installable auxiliary contact, left side mount, (1) N.O./ (1) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.         | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ACBS-20</u></a>                                       | \$9.00  | Field installable auxiliary contact, left side mount, (2) N.O. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.                   | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ACBS-02</u></a>                                       | \$9.00  | Field installable auxiliary contact, left side mount, (2) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.                   | <a href="#"><u>PDF</u></a> |
| <b>Accessories for Combination Type-E Construction</b>               |         |   |                            |
| <a href="#"><u>LST25</u></a>   | \$17.00 | Incoming power terminal block, 3-pole, maximum current 63A, 20-8 AWG. For use with MPW40 series manual motor protectors. Required when using a MPW40 in a UL Type E application 32A and less. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>TSB</u></a>   | \$15.00 | Field installable short circuit alarm contact, left side mount, (2) N.O./ (2) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors. | <a href="#"><u>PDF</u></a> |
| <b>Current Limiter</b>   |         |   |                            |
| <a href="#"><u>CLT32MPW40</u></a>                                    | \$45.00 | Current limiter, 35mm DIN rail mount. For use with MPW40 series manual motor protectors.  | <a href="#"><u>PDF</u></a> |
| <b>Link Modules</b>  |         |   |                            |
| <a href="#"><u>ECCMP-C0</u></a>                                      | \$8.50  | Link module, for use with MPW40 protectors and CWC07 through CWC016 series miniature contactors with AC or DC coils. Not for use with 4-Pole CWC series miniature contactors.                 | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-C025</u></a>                                    | \$8.50  | Link module, for use with MPW40 protectors and CWC025 series miniature contactors with AC coils. Not for use with 4-Pole CWC series miniature contactors.                                     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-40B38</u></a>                                   | \$10.00 | Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with AC coils.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-40B38DC</u></a>                                 | \$10.00 | Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with DC coils.  | <a href="#"><u>PDF</u></a> |



**ACBF-11**



**ACBS-11**



**ACBS-20**



**ACBS-02**



**LST25**



**TSB**



**CLT32MPW40**



**ECCMP-C0**



**ECCMP-C025**



**ECCMP-40B38**



**ECCMP-40B38DC**



# MPW Series Manual Motor Protectors

## Accessories, continued

### Accessories for MPW Series Manual Motor Protectors – Selection Guide

| Part Number                                  | Price   | Description  | Dimensional Drawing        |
|--|---------|--|----------------------------|
| <b>Through-the-Door Rotary Mechanisms</b>    |         |  |                            |
| <a href="#"><u>RMMP-130</u></a>              | \$28.50 | Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>RMMP-130E</u></a>             | \$28.50 | Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>RMMP-330</u></a>              | \$34.50 | Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>RMMP-330E</u></a>             | \$34.50 | Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-130</u></a>               | \$42.50 | Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-130E</u></a>              | \$42.50 | Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-330</u></a>               | \$46.50 | Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-330E</u></a>              | \$46.50 | Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.  | <a href="#"><u>PDF</u></a> |
| <b>Under Voltage and Shunt Trip Releases</b> |         |  |                            |
| <a href="#"><u>SRMPD51</u></a>               | \$22.50 | Field installable shunt trip, right side mount, 20-24 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 series manual motor protectors.                               | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>SRMPD59</u></a>               | \$22.50 | Field installable shunt trip, right side mount, 100-127 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 series manual motor protectors.                             | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>SRMPD65</u></a>               | \$22.50 | Field installable shunt trip, right side mount, 200-240 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 series manual motor protectors.                             | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV18</u></a>               | \$22.50 | Field installable undervoltage trip device, right side mount, 110 VAC (50Hz)/120 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV23</u></a>               | \$22.50 | Field installable undervoltage trip device, right side mount, 180 VAC (50Hz)/208 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV30</u></a>               | \$22.50 | Field installable undervoltage trip device, right side mount, 208 VAC (50Hz)/240 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV37</u></a>               | \$22.50 | Field installable undervoltage trip device, right side mount, 230-240 VAC (50Hz)/277 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV47</u></a>               | \$22.50 | Field installable undervoltage trip device, right side mount, 400-415 VAC (50Hz)/480 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPD02</u></a>               | \$22.50 | Field installable undervoltage trip device, right side mount, 24 VAC (50/60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.                  | <a href="#"><u>PDF</u></a> |

**RMMP-130****MRX-130****MRX-130E****SRMPD51****URMPV18****URMPD02**



# Self Protected Combination Type-E Motor Controller

Combination starters are the most common type of packaged motor controllers. They are called combination because of their construction and combined functions required by the US National Electric Code (NEC): Motor Disconnect, Motor Branch Circuit Protection, Motor Controller and Motor Overload Protection. UL currently recognizes six different types of combination starters that meet the requirements of a motor branch circuit.

Constructions Types A through D are traditional starters that use either a listed disconnect switch and fuses or a listed circuit breakers as the disconnect means and for short circuit protection. Each type uses a separate UL 508 listed motor controller and overload relay. Recently revisions on UL508 introduced the Type E and Type F starters.

WEG's self-protected combination Type E combines all of these functions within a single product for a manual operation or within a set of two products (with a listed contactor) for a remote operation. Both options must be associated with the accessories Line Side Terminal (LST25) and Tripping Signaling Block (TSB) to accomplish UL508/UL489 requirements for spacing (clearance and creepage) and short-circuit indication.

They are recommended for a wide range of applications where full voltage combination starters are required. Some examples are: Pumps, Industrial Washing Machines, Compressors, Blowers, Cutting Machines, Conveyors, Lumber Processing and many others.

The Manual Type E Starter is a stand-alone product – MPW series – that ranges from fractional up to 20Hp@460V motors (0.16 to 32A) with up to 100KA@480V and 50KA@600V interrupting short-circuit capability. Together with some accessories that complete this product line, the MPW series are a compact and reliable solution for starting and protecting motors.

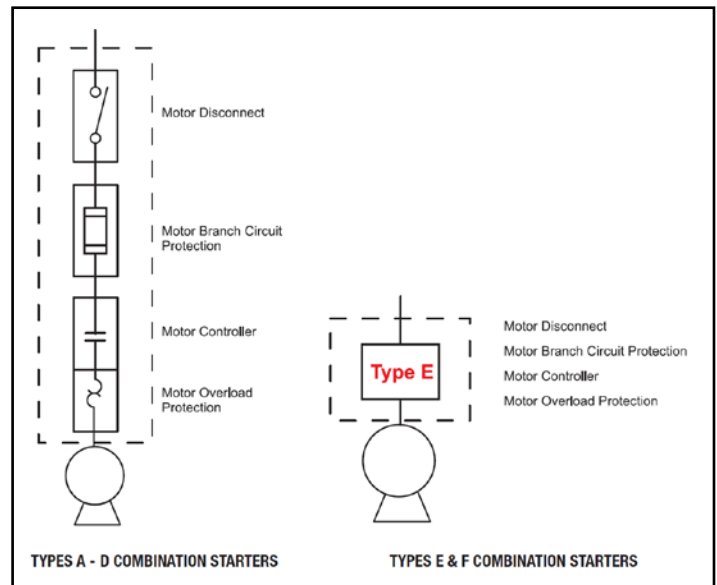
WEG also offers an option for a remote Type E & F Starter, combining the MPW series (as a manual type E) together with a contactor from the CWB Series. As this version undergoes the same tests, it has the same horse power ratings and short-circuit capabilities as the manual Type E. However, it provides remote operation and controlling of the application through the contactor's coil.

| UL Combination Starter Type | Device Used for Component Function                  |                                      |   |   |
|-----------------------------|---|--------------------------------------|---|---|
|                             | Disconnected  | Branch Circuit Protection            | Motor Controller                          | Motor OL Relay                                      |
| <b>A</b>                    |   | UL 248 Fuses                         | UL 508 Magnetic or Solid State Controller | UL 508 Motor Overload Relay                         |
| <b>B</b>                    | UL 98 Manual Disconnect                             | UL 508 Motor Short Circuit Protector |   |   |
| <b>C</b>                    | UL 489 Inverse Time Circuit Breaker                 |                                      |   |   |
| <b>D</b>                    | UL 489 Instantaneous Trip Circuit Breaker           |                                      |   |   |
| <b>E</b>                    | UL 508 Self-Protected Combination Controller        |                                      |   |   |
| <b>F</b>                    | UL 508 Manual Self-Protected Combination Controller |                                      | UL 508 Magnetic or Solid State Controller | UL 508 Manual Self-Protected Combination Controller |

Type E starter is a self-protected combination motor controller that combines in a single device all the required functions of a combination starter and eliminates any additional requirements for upstream fuses or circuit breakers. These starters clear faults within their rating without sustaining damage to themselves or the rest of the system, being able to get back into operation. There are two arrangements for a Type E starter: manual (as stand-alone) and associated with a contactor. Both are submitted to the same tests sequences.

Type F starter consists of a listed manual Type E combined with a UL508 listed contactor. The difference between the two types is related to the absence of self-protected characteristic; hence, Type F has softened tests sequences allowing damages on the contactor after a fault.

Tests performed in order to fulfill the Type E requirements are considered the hardest in UL508, including short-circuit and endurance tests on the same sample. As a comparison, UL Type E exceeds the requirements for Type F and IEC60947-4-1 Coordination type 2.





# Manual Self Protected Combination Type-E Motor Controllers



MPW40-3-U001

## Manual Self-Protected Combination Type-E Motor Controllers

- No need for upstream protective devices such as UL489 MCCB or UL248 fuses
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 100kA@480VAC (50kA@600VAC)
- Compact combination starter
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

### Manual Self Protected Combination Type-E Motor Controllers (High Interruption Capacity) Selection Guide

| Part Number                  |                    |                    | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Interruption Capacity |
|------------------------------|--------------------|--------------------|-----------------------|-------|-------------|-------|-------|-------|---------------------|-------------------------------------|
| Manual Motor Protector       | Line Side Terminal | Tripping Indicator | Single-Phase          |       | Three-Phase |       |       |       |                     |                                     |
|                              |                    |                    | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  | 480V                |                                     |
| <a href="#">MPW40-3-U001</a> | LST25              | TSB                | -                     | -     | -           | -     | 1/2   | 1/2   | 0.63 - 1.0          | 65kA                                |
| <a href="#">MPW40-3-D016</a> |                    |                    | -                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 65kA                                |
| <a href="#">MPW40-3-D025</a> |                    |                    | -                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 65kA                                |
| <a href="#">MPW40-3-U004</a> |                    |                    | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 65kA                                |
| <a href="#">MPW40-3-D063</a> |                    |                    | 1/4                   | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 65kA                                |
| <a href="#">MPW40-3-U010</a> |                    |                    | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 65kA                                |
| <a href="#">MPW40-3-U016</a> |                    |                    | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 65kA                                |
| <a href="#">MPW40-3-U020</a> |                    |                    | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 50kA                                |
| <a href="#">MPW40-3-U025</a> |                    |                    | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 50kA                                |
| <a href="#">MPW40-3-U032</a> |                    |                    | -                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 42kA                                |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.

Note: Individual component catalog numbers are ordered separately.

### Manual Self Protected Combination Type-E Motor Controllers (Extra High Interruption Capacity) Selection Guide

| Part Number                  |                 |                    |                    | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Interruption Capacity |
|------------------------------|-----------------|--------------------|--------------------|-----------------------|-------|-------------|-------|-------|-------|---------------------|-------------------------------------|
| Manual Motor Protector       | Current Limiter | Line Side Terminal | Tripping Indicator | Single-Phase          |       | Three-Phase |       |       |       |                     |                                     |
|                              |                 |                    |                    | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  | 480V                |                                     |
| <a href="#">MPW40-3-U001</a> | CLT32MPW40      | LST25              | TSB                | -                     | -     | -           | -     | 1/2   | 1/2   | 0.63 - 1.0          | 100kA                               |
| <a href="#">MPW40-3-D016</a> |                 |                    |                    | -                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 100kA                               |
| <a href="#">MPW40-3-D025</a> |                 |                    |                    | -                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 100kA                               |
| <a href="#">MPW40-3-U004</a> |                 |                    |                    | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 100kA                               |
| <a href="#">MPW40-3-D063</a> |                 |                    |                    | 1/4                   | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 100kA                               |
| <a href="#">MPW40-3-U010</a> |                 |                    |                    | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 100kA                               |
| <a href="#">MPW40-3-U016</a> |                 |                    |                    | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 100kA                               |
| <a href="#">MPW40-3-U020</a> |                 |                    |                    | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 100kA                               |
| <a href="#">MPW40-3-U025</a> |                 |                    |                    | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 100kA                               |
| <a href="#">MPW40-3-U032</a> |                 |                    |                    | -                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 100kA                               |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.

Note: Individual component catalog numbers are ordered separately.



# Combination Type-F Motor Controllers



MPW40-3-U001

## Combination Type-F Motor Controllers

- No need for upstream protective devices such as UL489 MCCB or UL248 fuses
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 100kA@480VAC (50kA@600VAC)
- Compact combination starter
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)
- Remote operation

### Combination Type-F Motor Controllers (High Interruption Capacity) Selection Guide

| Part Number                  |                    |                    |             |           | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Interruption Capacity |
|------------------------------|--------------------|--------------------|-------------|-----------|-----------------------|-------|-------------|-------|-------|-------|---------------------|-------------------------------------|
| Manual Motor Protector       | Line Side Terminal | Tripping Indicator | Link Module | Contactor | Single-Phase          |       | Three-Phase |       |       |       |                     |                                     |
|                              |                    |                    |             |           | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  |                     |                                     |
| <a href="#">MPW40-3-U001</a> | LST25              | TSB                | ECCMP-40B38 | CWB9      | -                     | -     | -           | -     | 1/2   | 1/2   | 0.63 - 1.0          | 65kA                                |
| <a href="#">MPW40-3-D016</a> |                    |                    |             | CWB9      | -                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 65kA                                |
| <a href="#">MPW40-3-D025</a> |                    |                    |             | CWB9      | -                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 65kA                                |
| <a href="#">MPW40-3-U004</a> |                    |                    |             | CWB9      | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 65kA                                |
| <a href="#">MPW40-3-D063</a> |                    |                    |             | CWB9      | 1/4                   | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 65kA                                |
| <a href="#">MPW40-3-U010</a> |                    |                    |             | CWB9      | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 65kA                                |
| <a href="#">MPW40-3-U016</a> |                    |                    |             | CWB18     | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 65kA                                |
| <a href="#">MPW40-3-U020</a> |                    |                    |             | CWB18     | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 50kA                                |
| <a href="#">MPW40-3-U025</a> |                    |                    |             | CWB25     | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 42kA                                |

Notes: 1) Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.  
 2) Individual component catalog numbers are ordered separately.

### Combination Type-F Motor Controllers (Extra-High Interruption Capacity) Selection Guide

| Part Number                  |                    |                    |             |                 |           | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Interruption Capacity |
|------------------------------|--------------------|--------------------|-------------|-----------------|-----------|-----------------------|-------|-------------|-------|-------|-------|---------------------|-------------------------------------|
| Manual Motor Protector       | Line Side Terminal | Tripping Indicator | Link Module | Current Limiter | Contactor | Single-Phase          |       | Three-Phase |       |       |       |                     |                                     |
|                              |                    |                    |             |                 |           | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  |                     |                                     |
| <a href="#">MPW40-3-U001</a> | LST25              | TSB                | ECCMP-40B38 | CLT32MPW40      | CWB9      | -                     | -     | -           | -     | 1/2   | 1/2   | 0.63 - 1.0          | 100kA                               |
| <a href="#">MPW40-3-D016</a> |                    |                    |             |                 | CWB9      | -                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 100kA                               |
| <a href="#">MPW40-3-D025</a> |                    |                    |             |                 | CWB9      | -                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 100kA                               |
| <a href="#">MPW40-3-U004</a> |                    |                    |             |                 | CWB9      | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 100kA                               |
| <a href="#">MPW40-3-D063</a> |                    |                    |             |                 | CWB9      | 1/4                   | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 100kA                               |
| <a href="#">MPW40-3-U010</a> |                    |                    |             |                 | CWB9      | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 100kA                               |
| <a href="#">MPW40-3-U016</a> |                    |                    |             |                 | CWB18     | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 100kA                               |
| <a href="#">MPW40-3-U020</a> |                    |                    |             |                 | CWB18     | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 100kA                               |
| <a href="#">MPW40-3-U025</a> |                    |                    |             |                 | CWB25     | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 100kA                               |
| <a href="#">MPW40-3-U032</a> |                    |                    |             |                 | CWB32     | -                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 100kA                               |

Notes: 1) Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.  
 2) Individual component catalog numbers are ordered separately.





# Combination Type-F Motor Controllers

## Accessories for MPW Series Manual Motor Protectors

| Auxiliary Contact Block Accessories Selection Guide |        |                                 |                    |      |                     |
|---|--------|---------------------------------|--------------------|------|---------------------|
| Part Number   | Price  | Description                     | Auxiliary Contacts |      | Dimensional Drawing |
|   |        |                                 | N.O.               | N.C. |                     |
| <b>Front Mounting Auxiliary Contact Block – CBF</b> |        |                                 |                    |      |                     |
| <b>ACBF-11</b>                                      | \$8.25 | For use with MPW40 <sup>1</sup> | 1                  | 1    | <a href="#">PDF</a> |
| <b>Left Side Auxiliary Contact Block – ACBS</b>     |        |                                 |                    |      |                     |
| <b>ACBS-11</b>                                      | \$9.00 | For use with MPW40 <sup>1</sup> | 1                  | 1    | <a href="#">PDF</a> |
| <b>ACBS-20</b>                                      | \$9.00 |                                 | 2                  | –    | <a href="#">PDF</a> |
| <b>ACBS-02</b>                                      | \$9.00 |                                 | –                  | 2    | <a href="#">PDF</a> |



**ACBF-11**



**ACBS-11**

| Trip Signalling Block (TSB) Accessory Selection Guide |         |                    |   |                     |
|---|---------|--------------------|---|---------------------|
| Part Number   | Price   | For Use With       | Description   | Dimensional Drawing |
| <b>TSB</b>  | \$15.00 | MPW40 <sup>1</sup> | <ul style="list-style-type: none"> <li>Equipped with 2 auxiliary contacts (1 N.O. + 1 N.C.) for overload trip signalling and 2 other auxiliary contacts (1 N.O. + 1 N.C.) for short-circuit trip signalling.</li> <li>To reset the MPW after a short-circuit, the blue flag must be manually reset after the cause of the failure has been solved.</li> <li>Left side auxiliary contacts can be assembled together with the trip signalling block.</li> <li>Left side assembly only.</li> </ul> | <a href="#">PDF</a> |



**ACBS-20**



**ACBS-02**

| Undervoltage Release (URMP) Accessory Selection Guide |         |                    |                                |                     |
|---|---------|--------------------|--------------------------------|---------------------|
| Part Number   | Price   | For Use With       | Voltage                        | Dimensional Drawing |
| <b>URMPV23</b>  | \$22.50 | MPW40 <sup>1</sup> | 208VAC 60Hz                    | <a href="#">PDF</a> |
| <b>URMPD02</b>  | \$22.50 |                    | 24VAC 50/60Hz                  | <a href="#">PDF</a> |
| <b>URMPV47</b>  | \$22.50 |                    | 400-415 VAC 50Hz / 480VAC 60Hz | <a href="#">PDF</a> |
| <b>URMPV18</b>  | \$22.50 |                    | 110VAC50Hz / 120VAC 60Hz       | <a href="#">PDF</a> |
| <b>URMPV30</b>  | \$22.50 |                    | 240VAC 60Hz                    | <a href="#">PDF</a> |
| <b>URMPV37</b>  | \$22.50 |                    | 230-240 VAC 50Hz / 277VAC 60Hz | <a href="#">PDF</a> |



**TSB**



**URMPV18**

| Shunt Trip Releases Selection Guide |         |                    |                      |                     |
|-------------------------------------|---------|--------------------|----------------------|---------------------|
| Part Number                         | Price   | For Use With       | Voltage              | Dimensional Drawing |
| <b>SRMPD51</b>                      | \$22.50 | MPW40 <sup>1</sup> | 20-24 VAC 50/60 Hz   | <a href="#">PDF</a> |
| <b>SRMPD59</b>                      | \$22.50 |                    | 100-127 VAC 50/60 Hz | <a href="#">PDF</a> |
| <b>SRMPD65</b>                      | \$22.50 |                    | 200-240 VAC 50/60 Hz | <a href="#">PDF</a> |



**URMPD02**

| Link Modules for Manual Motor Protector Assembly + Contactors (ECCMP) Selection Guide |        |                    |   |                                |                     |
|---|--------|--------------------|---|--------------------------------|---------------------|
| Part Number   | Price  | For Use With       | Description   | Contactors                     | Dimensional Drawing |
| <b>ECCMP-C0</b>   | \$8.50 | MPW40 <sup>1</sup> | For direct connection (electrical and mechanical) of motor protector to contactors. | CWC07 through CWC016, AC coils | <a href="#">PDF</a> |
| <b>ECCMP-C025</b>   | \$8.50 |                    |   | CWC025, AC coils               | <a href="#">PDF</a> |



**ECCMP-C0**



**ECCMP-C025**

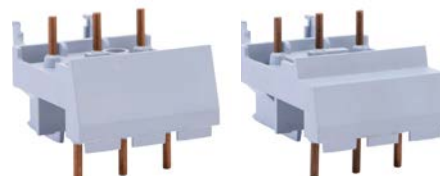
<sup>1</sup>The following accessories can be assembled at the same time: 1 ACBF + 1 URMP/SRMP + 1 TSB or 1 ACBS + 1 URMP/SRMP + 1 TSB



# Combination Type-F Motor Controllers

## Accessories (continued)

| Connector Links for MPW40 and CWB Contactors Selection Guide |         |              |   |                              |                            |
|--|---------|--------------|---|------------------------------|----------------------------|
| Part Number  | Price   | For Use With | Description   | Contactors                   | Dimensional Drawing        |
| <a href="#"><u>ECCMP-40B38</u></a>                           | \$10.00 | MPW40        | For direct connection (electrical and mechanical) of motor protector to contactors. | CWB9 through CWB38, AC coils | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-40B38DC</u></a>                         | \$10.00 |              |   | CWB9 through CWB38, DC coils | <a href="#"><u>PDF</u></a> |



**ECCMP-40B38**

**ECCMP-40B38DC**

| Through-the-Door Rotary Handle – RMMP and MRX Selection Guide |         |              |  |              |  |                            |                            |
|---|---------|--------------|--|--------------|--|----------------------------|----------------------------|
| Part Number   | Price   | For Use With | Description  | Handle Color | Dimensional Drawing  |                            |                            |
| <a href="#"><u>RMMP-130</u></a>                               | \$28.50 | MPW40        | <ul style="list-style-type: none"> <li>Degree of protection: IP55/NEMA1.</li> <li>Shows MPW position "1" (ON) or "0" (OFF).</li> <li>Panel door can only be opened in OFF position.</li> <li>Adjustable shaft length: 130-155 mm [5.12- 6.10 in] (Model 130) and 330-355 mm [12.99-13.98 in] (Model 330).</li> <li>To assemble the handle on the MPW, the shaft must have a length of at least 80mm [ 3.15 in]</li> <li>Up to three padlocks can be used in OFF position to block MPW operation and panel door opening</li> <li>Handle can be mounted on panels with thickness of 1-5 mm [0.04-0.20 in].</li> <li>Handle can be assembled even with MPW turned in the 90° position.</li> </ul> | Gray/black   | <a href="#"><u>PDF</u></a>   |                            |                            |
| <a href="#"><u>RMMP-330</u></a>                               | \$34.50 |              |  |              | <a href="#"><u>PDF</u></a>   |                            |                            |
| <a href="#"><u>RMMP-130E</u></a>                              | \$28.50 |              |  | Red/ yellow  | <a href="#"><u>PDF</u></a>   |                            |                            |
| <a href="#"><u>RMMP-330E</u></a>                              | \$34.50 |              |  |              | <a href="#"><u>PDF</u></a>   |                            |                            |
| <a href="#"><u>MRX-130</u></a>                                | \$42.50 |              |  | Gray/black   | <ul style="list-style-type: none"> <li>Panel door can be opened in ON position (thermometry) by defeating mechanism,</li> <li>Degree of protection: IP65/NEMA 4X.</li> <li>Shows MPW position "1" (ON) or "0" (OFF).</li> <li>Panel door can only be opened in OFF position.</li> <li>Adjustable shaft length: 130-155 mm [5.12- 6.10 in] (Model 130) and 330-355 mm [12.99-13.98 in] (Model 330).</li> <li>To assemble the handle on the MPW, the shaft must have a length of at least 80mm [ 3.15 in]</li> <li>Up to three padlocks can be used in OFF position to block MPW operation and panel door opening</li> <li>Handle can be mounted on panels with thickness of 1-5 mm [0.04-0.20 in].</li> </ul> | <a href="#"><u>PDF</u></a> |                            |
| <a href="#"><u>MRX-330</u></a>                                | \$46.50 |              |  |              |  | <a href="#"><u>PDF</u></a> |                            |
| <a href="#"><u>MRX-130E</u></a>                               | \$42.50 |              |  |              |  | Red/ yellow                | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-330E</u></a>                               | \$46.50 |              |  |              |  |                            | <a href="#"><u>PDF</u></a> |



**RMMP-130**



**MRX-130**

| Three-Phase Feeder Terminal – Selection Guide |         |              |  |                            |
|---|---------|--------------|--|----------------------------|
| Part Number                                   | Price   | For Use With | Description  | Dimensional Drawing        |
| <a href="#"><u>LST25</u></a>                  | \$17.00 | MPW40        | <ul style="list-style-type: none"> <li>Block module for "Type E" Combination Motor Controller" in accordance with UL (LST25+MPW+TSB)</li> <li>Rated insulation voltage: 690VAC.</li> <li>I<sub>g</sub>: 63A</li> <li>Terminals: 8-20AWG</li> </ul> | <a href="#"><u>PDF</u></a> |



**LST25**



# MPW40 Technical Data

| MPW40 – Specifications  |  |              |              |              |              |
|---|--|--------------|--------------|--------------|--------------|
| Type  | MPW40-3-U001   | MPW40-3-D016 | MPW40-3-D025 | MPW40-3-U004 | MPW40-3-D063 |
| <b>Standards</b>  | Devices according to International Standards IEC 60947-1 / 60947-4-1; European Standards EN 60947-1 / 60947-4-1; Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102 |              |              |              |              |
| <b>Current Setting Range</b>                                    | 0.63-1.0 A   | 1.0 - 1.6 A  | 1.6 - 2.5 A  | 2.5-4.0 A    | 4.0-6.3 A    |
| <b>Rated Thermal Current <math>I_{th}</math></b>                | 1.0 A  | 1.6 A        | 2.5 A        | 4.0 A        | 6.3 A        |
| <b>Rated Insulation Voltage <math>U_i</math></b>                |  |              |              |              |              |
| <b>Acc. IEC; VDE 0660</b>                                       | 690V   |              |              |              |              |
| <b>Acc. UL; CSA</b>   | 600V   |              |              |              |              |
| <b>Rated Operating Voltage <math>U_e</math></b>                 |  |              |              |              |              |
| <b>Acc. IEC; VDE 0660</b>                                       | 690V   |              |              |              |              |
| <b>Acc. UL; CSA</b>   | 600V   |              |              |              |              |
| <b>Rated Impulse Voltage <math>U_{imp}</math></b>               |  |              |              |              |              |
| <b>Acc. IEC60947-1</b>  | 6kV  |              |              |              |              |
| <b>Rated Operating Frequency</b>                                | 50/60 Hz   |              |              |              |              |
| <b>Overvoltage Category</b>                                     | III  |              |              |              |              |
| <b>Pollution Degree</b>   | 3  |              |              |              |              |
| <b>Utilization Category</b>                                     |  |              |              |              |              |
| <b>IEC 60947-2 (Motor Protector)</b>                            | A  |              |              |              |              |
| <b>IEC 60947-4-1 (Motor Starter)</b>                            | AC-3   |              |              |              |              |
| <b>Lifespan</b>   |  |              |              |              |              |
| <b>Mechanical</b>   | 100,000 operations   |              |              |              |              |
| <b>Electrical (<math>I_e</math> max.)</b>                       | 100,000 operations   |              |              |              |              |
| <b>Switching Rate (motor starts) AC-3</b>                       | 15 operations/hour   |              |              |              |              |
| <b>Ambient Temperature</b>                                      |  |              |              |              |              |
| <b>Storage</b>  | -50°C to +80°C (-58°F to +176°F)   |              |              |              |              |
| <b>Operating</b>  | -20°C to +60°C (-4°F to +140°F)  |              |              |              |              |
| <b>Ambient Temperature Compensation</b>                         | -20°C to +60°C (-4°F to +140°F)  |              |              |              |              |
| <b>Climatic Proofing</b>  | IEC 60068-2-3 / IEC 60068-2-30   |              |              |              |              |
| <b>Altitude</b>   |  |              |              |              |              |
| <b>Up to 2,000m (6,600ft)</b>                                   | Nominal values (for higher altitudes refer to Altitude Correction Factors table)   |              |              |              |              |
| <b>Degree of protection</b>                                     | IP20   |              |              |              |              |
| <b>Resistance to Shock</b>                                      |  |              |              |              |              |
| <b>Acc. IEC 60068-2-27</b>                                      | 15g  |              |              |              |              |
| <b>Resistance to Vibration</b>                                  | IEC 68-2   |              |              |              |              |
| <b>Protection Against Direct Contact</b>                        |  |              |              |              |              |
| <b>Acc. IEC 536; DIN VDE 0106 Part 100</b>                      | Finger and back of hand proof  |              |              |              |              |
| <b>Phase Failure Sensitivity Protection</b>                     | Yes  |              |              |              |              |
| <b>Overload Protection Characteristics (<math>x I_U</math>)</b> | 0.6 - 1 A  |              |              |              |              |
| <b>Magnetic Release (<math>x I_U</math>)</b>                    | 13A  |              |              |              |              |
| <b>Overload Trip Class</b>                                      | 10   |              |              |              |              |
| <b>Total Power Loss <math>P_V</math></b>                        |  |              |              |              |              |
| <b>At rated load operating temperature</b>                      | 6W   | 6W           | 6W           | 6W           | 6W           |
| <b>Weight</b>   | 0.32 kg [0.71 lb]  |              |              |              |              |
| <b>Type of Terminal</b>   | Flat type  |              |              |              |              |
| <b>Screw Driver</b>   | Phillips #2  |              |              |              |              |
| <b>Terminal Capacity</b>  |  |              |              |              |              |
| <b>Solid-Stranded</b>   | 1 or 2 x (0.5 to 2.5)  |              |              |              |              |
| <b>Tightening Torque</b>  | 1.2-1.7 N·m [11-16 lb·in]  |              |              |              |              |
| <b>Mounting Position</b>  | Any position   |              |              |              |              |



# MPW40 Technical Data

| MPW40 – Specifications (continued)                              |  |              |              |              |              |
|---|--|--------------|--------------|--------------|--------------|
| Type  | MPW40-3-U010   | MPW40-3-U016 | MPW40-3-U020 | MPW40-3-U025 | MPW40-3-U032 |
| <b>Standards</b>  | Devices according to International Standards IEC 60947-1 / 60947-4-1; European Standards EN 60947-1 / 60947-4-1; Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102 |              |              |              |              |
| <b>Current Setting Range</b>                                    | 6.3 - 10 A   | 10 - 16 A    | 16 - 20 A    | 20 - 25 A    | 25 - 32 A    |
| <b>Rated Thermal Current <math>I_{th}</math></b>                | 10A  | 16A          | 20A          | 25A          | 32A          |
| <b>Rated Insulation Voltage <math>U_i</math></b>                |  |              |              |              |              |
| <b>Acc. IEC; VDE 0660</b>                                       | 690V   |              |              |              |              |
| <b>Acc. UL; CSA</b>   | 600V   |              |              |              |              |
| <b>Rated Operating Voltage <math>U_e</math></b>                 |  |              |              |              |              |
| <b>Acc. IEC; VDE 0660</b>                                       | 690V   |              |              |              |              |
| <b>Acc. UL; CSA</b>   | 600V   |              |              |              |              |
| <b>Rated Impulse Voltage <math>U_{imp}</math></b>               |  |              |              |              |              |
| <b>Acc. IEC60947-1</b>  | 6kV  |              |              |              |              |
| <b>Rated Operating Frequency</b>                                | 50/60 Hz   |              |              |              |              |
| <b>Overvoltage Category</b>                                     | III  |              |              |              |              |
| <b>Pollution Degree</b>   | 3  |              |              |              |              |
| <b>Utilization Category</b>                                     |  |              |              |              |              |
| <b>IEC 60947-2 (Motor Protector)</b>                            | A  |              |              |              |              |
| <b>IEC 60947-4-1 (Motor Starter)</b>                            | AC-3   |              |              |              |              |
| <b>Lifespan</b>   |  |              |              |              |              |
| <b>Mechanical</b>   | 100,000 operations   |              |              |              |              |
| <b>Electrical (<math>I_e</math> max.)</b>                       | 100,000 operations   |              |              |              |              |
| <b>Switching Rate (motor starts) AC-3</b>                       | 15 operations/hour   |              |              |              |              |
| <b>Ambient Temperature</b>                                      |  |              |              |              |              |
| <b>Storage</b>  | -50°C to +80°C (-58°F to +176°F)   |              |              |              |              |
| <b>Operating</b>  | -20°C to +60°C (-4°F to +140°F)  |              |              |              |              |
| <b>Ambient Temperature Compensation</b>                         | -20°C to +60°C (-4°F to +140°F)  |              |              |              |              |
| <b>Climatic Proofing</b>  | IEC 60068-2-3 / IEC 60068-2-30   |              |              |              |              |
| <b>Altitude</b>   |  |              |              |              |              |
| <b>Up to 2,000m (6,600ft)</b>                                   | Nominal values (for higher altitudes refer to Altitude Correction Factor tables)   |              |              |              |              |
| <b>Degree of protection</b>                                     | IP20   |              |              |              |              |
| <b>Resistance to Shock</b>                                      |  |              |              |              |              |
| <b>Acc. IEC 60068-2-27</b>                                      | 15g  |              |              |              |              |
| <b>Resistance to Vibration</b>                                  | IEC 68-2   |              |              |              |              |
| <b>Protection Against Direct Contact</b>                        |  |              |              |              |              |
| <b>Acc. IEC 536; DIN VDE 0106 Part 100</b>                      | Finger and back of hand proof  |              |              |              |              |
| <b>Phase Failure Sensitivity Protection</b>                     | Yes  |              |              |              |              |
| <b>Overload Protection Characteristics (<math>x I_U</math>)</b> | 0.6 - 1 A  |              |              |              |              |
| <b>Magnetic Release (<math>x I_U</math>)</b>                    | 13A  |              |              |              |              |
| <b>Overload Trip Class</b>                                      | 10A  |              |              |              |              |
| <b>Total Power Loss <math>P_v</math></b>                        |  |              |              |              |              |
| <b>At rated load operating temperature</b>                      | 6W   | 6W           | 8W           | 8W           | 8W           |
| <b>Weight</b>   | 0.32 kg [0.71 lb]  |              |              |              |              |
| <b>Type of Terminal</b>   | Flat type  |              |              |              |              |
| <b>Screw Driver</b>   | Phillips #2  |              |              |              |              |
| <b>Terminal Capacity</b>  |  |              |              |              |              |
| <b>Solid-Stranded</b>   | 1 or 2 x (0.5 to 2.5)  |              |              |              |              |
| <b>Tightening Torque</b>  | 1.2-1.7 N·m [11-16 lb·in]  |              |              |              |              |
| <b>Mounting Position</b>  | Any position   |              |              |              |              |



# MPW40 Technical Data

| MPW40 – Specifications – Power Contact Ratings                        |              |              |              |              |              |
|---|--------------|--------------|--------------|--------------|--------------|
| Type  | MPW40-3-U001 | MPW40-3-D016 | MPW40-3-D025 | MPW40-3-U004 | MPW40-3-D063 |
| <b>UL/CSA Data</b>  |              |              |              |              |              |
| <b>Rated Operational Current <math>I_e</math></b>                     | 1.0 A        | 1.6 A        | 2.5 A        | 4.0 A        | 6.3 A        |
| <b>Magnetic Release Current</b>                                       | 13A          | 21A          | 33A          | 52A          | 82A          |
| <b>Max. Short Circuit Current</b>                                     |              |              |              |              |              |
| <b>Without CLT32 (480V)</b>   | 65kA         | 65kA         | 65kA         | 65kA         | 65kA         |
| <b>Without CLT32 (600V)</b>   | 25kA         | 25kA         | 25kA         | 25kA         | 25kA         |
| <b>With CLT32 (480V)</b>  | 100kA        | 100kA        | 100kA        | 100kA        | 100kA        |
| <b>With CLT32 (600V)</b>  | 50kA         | 50kA         | 50kA         | 50kA         | 50kA         |
| <b>Motor Load, 1-phase (115V)</b>                                     | –            | –            | –            | 1/8 hp       | 1/4 hp       |
| <b>Motor Load, 1-phase (230V)</b>                                     | –            | 1/10 hp      | 1/6 hp       | 1/3 hp       | 3/4 hp       |
| <b>Motor Load, 3-phase (200V)</b>                                     | –            | 1/4 hp       | 1/2 hp       | 3/4 hp       | 1 1/2 hp     |
| <b>Motor Load, 3-phase (230V)</b>                                     | –            | 1/3 hp       | 1/2 hp       | 1 hp         | 1 1/2 hp     |
| <b>Motor Load, 3-phase (460V)</b>                                     | 1/2          | 3/4 hp       | 1 1/2 hp     | 2 hp         | 5 hp         |
| <b>Motor Load, 3-phase (575V)</b>                                     | 1/2          | 1 hp         | 1 1/2 hp     | 3 hp         | 5 hp         |
| <b>Max. Rated Current of Protection Device for Group Installation</b> |              |              |              |              |              |
| <b>Fuse or MCCB</b>   | 125A         | 125A         | 125A         | 125A         | 125A         |

| MPW40 – Specifications – Power Contact Ratings                        |              |              |              |              |              |
|---|--------------|--------------|--------------|--------------|--------------|
| Type  | MPW40-3-U010 | MPW40-3-U016 | MPW40-3-U020 | MPW40-3-U025 | MPW40-3-U032 |
| <b>UL/CSA Data</b>  |              |              |              |              |              |
| <b>Rated Operational Current <math>I_e</math></b>                     | 10A          | 16A          | 20A          | 25A          | 32A          |
| <b>Magnetic Release Current</b>                                       | 130A         | 208A         | 260A         | 325A         | 416A         |
| <b>Max. Short Circuit Current</b>                                     |              |              |              |              |              |
| <b>Without CLT32 (480V)</b>   | 65kA         | 50kA         | 50kA         | 50kA         | 50kA         |
| <b>Without CLT32 (600V)</b>   | 25kA         | 25kA         | 25kA         | 25kA         | 25kA         |
| <b>With CLT32 (480V)</b>  | 100kA        | 100kA        | 100kA        | 100kA        | 100kA        |
| <b>With CLT32 (600V)</b>  | 50kA         | 50kA         | 50kA         | 50kA         | 50kA         |
| <b>Motor Load, 1-phase (115V)</b>                                     | 1/2 hp       | 1 hp         | 1 1/2 hp     | 2 hp         | –            |
| <b>Motor Load, 1-phase (230V)</b>                                     | 1 1/2 hp     | 3 hp         | 3 hp         | 3 hp         | 5 hp         |
| <b>Motor Load, 3-phase (200V)</b>                                     | 3 hp         | 5 hp         | 5 hp         | 7 1/2 hp     | 10 hp        |
| <b>Motor Load, 3-phase (230V)</b>                                     | 3 hp         | 5 hp         | 7 1/2 hp     | 7 1/2 hp     | 10 hp        |
| <b>Motor Load, 3-phase (460V)</b>                                     | 7 1/2 hp     | 10 hp        | 15 hp        | 15 hp        | 20 hp        |
| <b>Motor Load, 3-phase (575V)</b>                                     | 10 hp        | 15 hp        | 20 hp        | 20 hp        | 25 hp        |
| <b>Max. Rated Current of Protection Device for Group Installation</b> |              |              |              |              |              |
| <b>Fuse or MCCB</b>   | 125A         | 160A         | 250A         | 250A         | 300A         |



# MPW Technical Data

| Auxiliary Contact Ratings                         |          |        |         |        |  |         |
|---|----------|--------|---------|--------|--|---------|
| Type  | ACBF-11  |        | ACBS-11 |        | ACBS-20                                | ACBS-02 |
| <b>Rated Insulation Voltage <math>U_i</math></b>  |          |        |         |        |  |         |
| Acc. IEC; VDE 0660                                | 300V     |        | 690V    |        | 690V                                   | 690V    |
| Acc. UL; CSA                                      | 240V     |        | 600V    |        | 600V                                   | 600V    |
| <b>Rated Operating Voltage <math>U_e</math></b>   |          |        |         |        |  |         |
| Acc. IEC; VDE 0660                                | 250V     |        | 690V    |        | 690V                                   | 690V    |
| Acc. UL; CSA                                      | 240V     |        | 600V    |        | 600V                                   | 600V    |
| <b>Rated Impulse Voltage <math>U_{imp}</math></b> |          |        |         |        |  |         |
| Acc. IEC60947-1                                   | 4kv      |        | 6kv     |        | 6kv                                    | 6kv     |
| Overvoltage Category                              | III      |        | III     |        | III                                    | III     |
| Pollution Degree                                  |          |        |         |        | 3                                      |         |
| <b>Life Span</b>                                  |          |        |         |        |  |         |
| Mechanical  |          |        |         |        | 100,000 operations                     |         |
| Electrical ( $I_e$ max.)                          |          |        |         |        | 100,000 operations                     |         |
| Rated Thermal Current $I_{th}$                    | 2.5 A    |        | 10A     |        | 10A                                    | 10A     |
| <b>Rated Operating Current <math>I_e</math></b>   |          |        |         |        |  |         |
| Acc. IEC 60947-5-1 / AC-15                        | 24V      | 2A     | 6A      | 6A     | 6A                                     | 6A      |
|   | 110-127V | 0.5 A  | 6A      | 6A     | 6A                                     | 6A      |
|   | 220-240V | 0.5 A  | 6A      | 6A     | 6A                                     | 6A      |
|   | 380-400V | –      | 3A      | 3A     | 3A                                     | 3A      |
|   | 415-450V | –      | 1A      | 1A     | 1A                                     | 1A      |
|   | 500V     | –      | 1A      | 1A     | 1A                                     | 1A      |
|   | 660-690V | –      | 1A      | 1A     | 1A                                     | 1A      |
| Acc. UL; CSA                                      | C300     |        | A600    |        | A600                                   | A600    |
| <b>Rated Operating Current <math>I_e</math></b>   |          |        |         |        |  |         |
| Acc. IEC 60947-5-1 / DC-13                        | 24V      | 1A     | 2A      | 2A     | 2A                                     | 2A      |
|   | 48V      | 0.3 A  | 0.8 A   | 0.8 A  | 0.8A                                   | 0.8A    |
|   | 60V      | 0.15 A | 0.5 A   | 0.5 A  | 0.5 A                                  | 0.5 A   |
|   | 110V     | –      | 0.5 A   | 0.5 A  | 0.5 A                                  | 0.5 A   |
|   | 220V     | –      | 0.25 A  | 0.25 A | 0.25 A                                 | 0.25 A  |
|   | 440V     | –      | 0.1 A   | 0.1 A  | 0.1 A                                  | 0.1 A   |
| Acc. UL; CSA                                      | R300     |        | Q600    |        | Q600                                   | Q600    |
| <b>Short Circuit Rating Without Welding</b>       |          |        |         |        |  |         |
| RK5   |          |        |         |        | 10A                                    |         |
| MCB   |          |        |         |        | 6A                                     |         |
| Type of Terminal                                  |          |        |         |        | Screwdriver; Philips #2                |         |
| <b>Terminal Capacity</b>                          |          |        |         |        |  |         |
| Solid or Stranded                                 |          |        |         |        | 1 or 2 x (0.5 to 2.5 mm <sup>2</sup> ) |         |
| Solid or Stranded                                 |          |        |         |        | 1 or 2 x (18 to 14 AWG)                |         |
| Tightening Torque                                 |          |        |         |        | 1.0-1.25 N•m [8.85-11.06 lb•in]        |         |



# MPW

## Technical Data

| <b>Trip Signalling Block Ratings</b>              |  |        |
|---|--|--------|
| <b>Type</b>                                       | <b>TSB</b>                             |        |
| <b>Rated Insulation Voltage <math>U_i</math></b>  |  |        |
| Acc. IEC; VDE 0660                                | 690V                                   |        |
| Acc. UL; CSA                                      | 600V                                   |        |
| <b>Rated Operating Voltage <math>U_e</math></b>   |  |        |
| Acc. IEC; VDE 0660                                | 690V                                   |        |
| Acc. UL; CSA                                      | 600V                                   |        |
| <b>Rated Impulse Voltage <math>U_{imp}</math></b> |  |        |
| Acc. IEC60947-1                                   | 6kv                                    |        |
| <b>Overvoltage Category</b>                       | III                                    |        |
| <b>Pollution Degree</b>                           | 3                                      |        |
| <b>Life Span</b>                                  |  |        |
| <b>Mechanical</b>                                 | 100,000 operations                     |        |
| <b>Electrical (<math>I_e</math> max.)</b>         | 100,000 operations                     |        |
| <b>Rated Thermal Current <math>I_{th}</math></b>  | 10A                                    |        |
| <b>Rated Operating Current <math>I_e</math></b>   |  |        |
| Acc. IEC 60947-5-1 / AC-15                        | 24V                                    | 6A     |
|   | 110-127V                               | 6A     |
|   | 220-240V                               | 6A     |
|   | 380-400V                               | 3A     |
|   | 415-450V                               | 3A     |
|   | 500V                                   | 2A     |
|   | 660-690V                               | 1A     |
| Acc. UL; CSA                                      | A600                                   |        |
| <b>Rated Operating Current <math>I_e</math></b>   |  |        |
| Acc. IEC 60947-5-1 / DC-13                        | 24V                                    | 2A     |
|   | 48V                                    | 0.5 A  |
|   | 60V                                    | 0.5 A  |
|   | 110V                                   | 0.5 A  |
|   | 220V                                   | 0.25 A |
|   | 440V                                   | 0.1 A  |
| Acc. UL; CSA                                      | Q600                                   |        |
| <b>Short Circuit Rating Without Welding</b>       |  |        |
| <b>Fuse RK5</b>                                   | 6A                                     |        |
| <b>MCB</b>  | 6A                                     |        |
| <b>Type of Terminal</b>                           | Screwdriver; Philips #2                |        |
| <b>Terminal Capacity</b>                          |  |        |
| <b>Solid or Stranded</b>                          | 1 or 2 x (0.5 to 2.5 mm <sup>2</sup> ) |        |
| <b>Solid or Stranded</b>                          | 1 or 2 x (18 to 14 AWG)                |        |
| <b>Tightening Torque</b>                          | 1.0-1.25 N•m [8.85-11.06 lb•in]        |        |



# MPW Technical Data

| Shunt Trip Ratings                                |  |
|---|--|
| Type  | SRMP                                   |
| <b>Rated Insulation Voltage <math>U_i</math></b>  |  |
| Acc. IEC; VDE 0660                                | 690V                                   |
| Acc. UL; CSA                                      | 600V                                   |
| <b>Rated Operating Voltage <math>U_e</math></b>   |  |
| Acc. IEC; VDE 0660                                | 690V                                   |
| Acc. UL; CSA                                      | 600V                                   |
| <b>Rated Impulse Voltage <math>U_{imp}</math></b> |  |
| Acc. IEC60947-1                                   | 6kv                                    |
| Overvoltage Category                              | III                                    |
| Pollution Degree                                  | 3                                      |
| <b>Life Span</b>                                  |  |
| Mechanical  | 100,000 operations                     |
| Electrical ( $I_e$ max.)                          | 100,000 operations                     |
| Actuating Voltage ( $x U_S$ )                     | 0.7-1.1 V                              |
| <b>Power Consumption</b>                          |  |
| Pull-In   | 20.2 VA [13W]                          |
| Hold  | 7.2 VA [2.4 W]                         |
| Maximum Opening Time                              | 20ms                                   |
| <b>Short Circuit Rating Without Welding</b>       |  |
| Fuse RK5  | 10A                                    |
| MCB   | 6A                                     |
| Type of Terminal                                  | Screwdriver; Philips #2                |
| <b>Terminal Capacity</b>                          |  |
| Solid or Stranded                                 | 1 or 2 x (0.5 to 2.5 mm <sup>2</sup> ) |
| Solid or Stranded                                 | 1 or 2 x (18 to 14 AWG)                |
| Tightening Torque                                 | 1.0-1.25 N•m [8.85-11.06 lb•in]        |

| Undervoltage Trip Ratings                         |  |
|---|--|
| Type  | URMP                                   |
| <b>Rated Insulation Voltage <math>U_i</math></b>  |  |
| Acc. IEC; VDE 0660                                | 690V                                   |
| Acc. UL; CSA                                      | 600V                                   |
| <b>Rated Operating Voltage <math>U_e</math></b>   |  |
| Acc. IEC; VDE 0660                                | 690V                                   |
| Acc. UL; CSA                                      | 600V                                   |
| <b>Rated Impulse Voltage <math>U_{imp}</math></b> |  |
| Acc. IEC60947-1                                   | 6kv                                    |
| Overvoltage Category                              | III                                    |
| Pollution Degree                                  | 3                                      |
| <b>Life Span</b>                                  |  |
| Mechanical  | 100,000 operations                     |
| Electrical ( $I_e$ max.)                          | 100,000 operations                     |
| Pick-Up Voltage ( $x U_S$ )                       | 0.85-1.1 V                             |
| Drop-Out Voltage ( $x U_S$ )                      | 0.7-0.35 V                             |
| <b>Power Consumption</b>                          |  |
| Pull-In   | 20.2 VA [13W]                          |
| Hold  | 7.2 VA [2.4 W]                         |
| Maximum Opening Time                              | 20ms                                   |
| <b>Short Circuit Rating Without Welding</b>       |  |
| Fuse gL/gG  | 10A                                    |
| MCB   | 6A                                     |
| Type of Terminal                                  | Screwdriver; Philips #2                |
| <b>Terminal Capacity</b>                          |  |
| Solid or Stranded                                 | 1 or 2 x (0.5 to 2.5 mm <sup>2</sup> ) |
| Solid or Stranded                                 | 1 or 2 x (18 to 14 AWG)                |
| Tightening Torque                                 | 1.0-1.25 N•m [8.85-11.06 lb•in]        |

| Main Terminal Capacity |                         |                      |   |
|------------------------|-------------------------|----------------------|---|
| Part Number            | Type                    | Number of Conductors | Cross-Section   |
| MPW40-x-xxxx           | Rigid or flexible cable | 1 or 2               | 1 to 2.5 mm <sup>2</sup><br>2.5 to 6 mm <sup>2</sup><br>14 to 8 AWG |





# MPW Technical Data

## Altitude – Correction Factor

The MPW manual motor protectors do not undergo any change in their specified performance when used at an altitude of up to 2000 meters above sea level. However, as the altitude increases, the reduced atmospheric pressure results in decreasing dielectric properties. Therefore, current and voltage correction factors must be applied for altitudes exceeding 2000 meters, as shown in the table at right.

| Altitude $h$<br>(above sea level) | Rated operational voltage $U_e$ | Current correction factor $I_u$ |
|-----------------------------------|---------------------------------|---------------------------------|
| $h \leq 2000$ m                   | 690V                            | $1 \times I_u$                  |
| $2000 < h \leq 3000$ m            | 550V                            | $0.96 \times I_u$               |
| $3000 < h \leq 4000$ m            | 480V                            | $0.93 \times I_u$               |
| $4000 < h \leq 5000$ m            | 420V                            | $0.90 \times I_u$               |

## DC Operation

The MPW40 motor protective circuit breaker can also be used for operating DC loads. For such operation it is necessary to connect 2 or 3 poles in series. See recommended circuits and their voltage limits in the table at right.

Time constant  $t = 5$ ms

Short-circuit breaking capacity  $I_{cu} = 10$  kA  
for all configurations

| Circuits | Max. VDC | Notes   |
|----------|----------|---|
|          | 150V     | System not grounded<br>2 poles series connected |
|          | 300V     | System grounded<br>2 poles series connected     |
|          | 450V     | System grounded<br>3 poles series connected     |

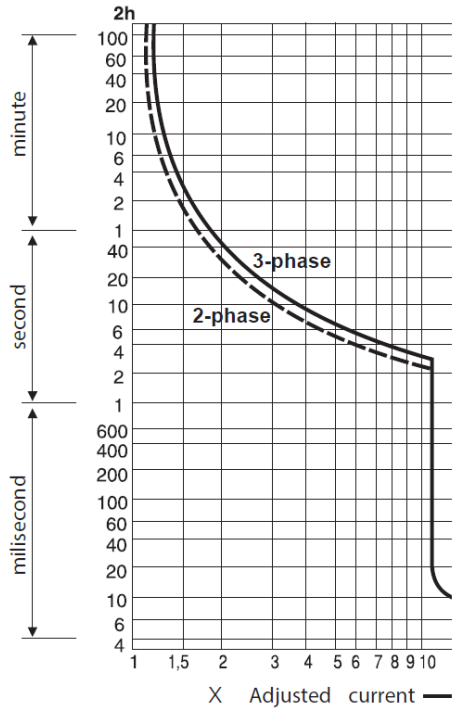
# MPW Technical Data

## Time Current Characteristic MPW40 Class 10

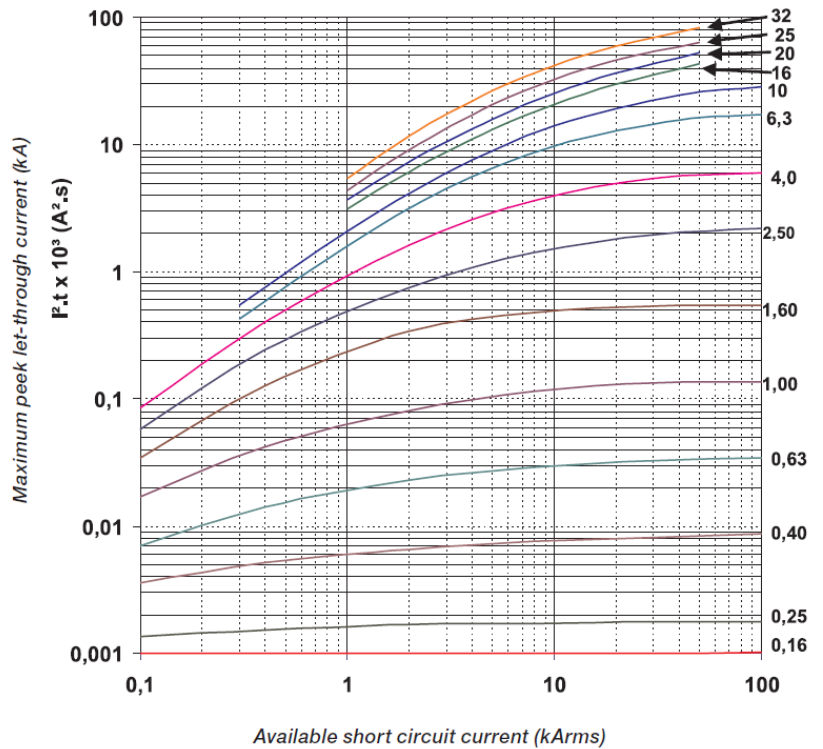
The tripping characteristic indicates the manual motor protector trip time in relation to the rated current.

The curves show average tolerance range values for an ambient temperature of 20°C [68°F], starting in a cold state. Thermal trip time when working in operating temperature is reduced to around 25% of the listed values. Under normal operating conditions, all three manual motor protector phases must be conducting.

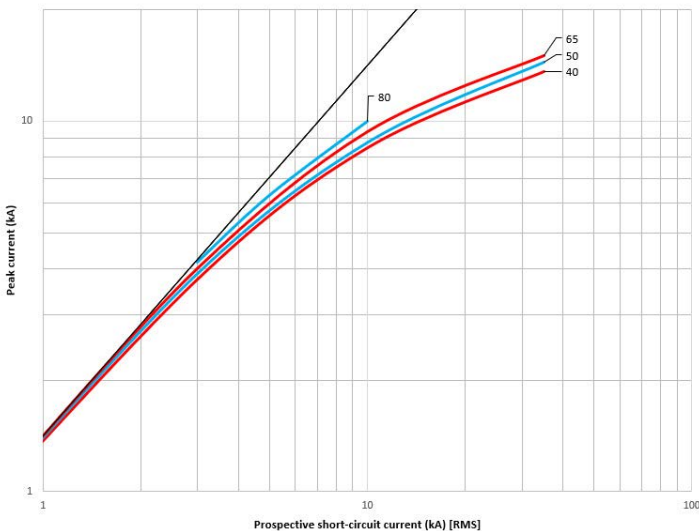
### MPW40/80



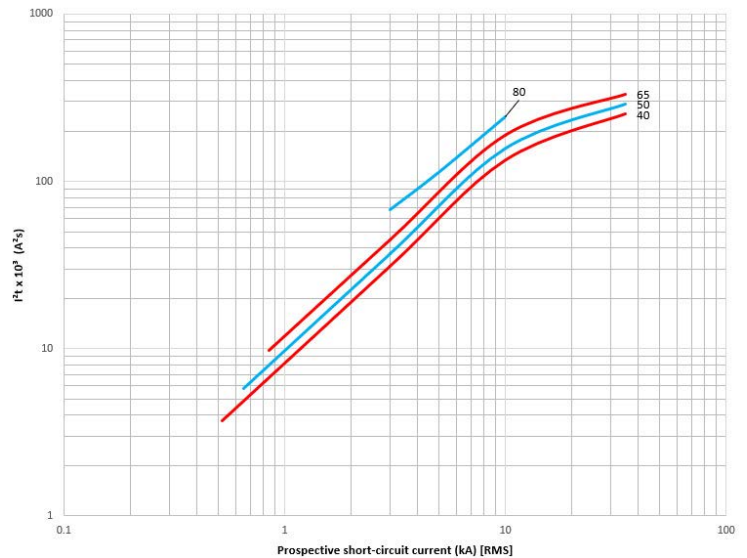
### Characteristic $I^2t$ at 460V – MPW40



### Short-Circuit Current Limitation Curve at 500V – MPW80



### Characteristic $I^2t$ at 500V – MPW80





# MPW Technical Data

## Short Circuit Interruption Capacity UL/CSA for MPW40

| Setting<br>Overload<br>Release<br>(A) | Manual Motor Controller<br>High Capacity |                |                |                         | Combination Motor Controller (Type E/F)<br>High Capacity |                    |                    |                         | Combination Motor Controller (Type E/F)<br>Extra High Capacity |                    |                    |                         |
|---------------------------------------|--|----------------|----------------|-------------------------|--|--------------------|--------------------|-------------------------|--|--------------------|--------------------|-------------------------|
|                                       | 240VAC                                   | 480Y<br>277VAC | 600Y<br>347VAC | Max.<br>Fuse or<br>MCCB | 240VAC   | 480VAC<br>Y/277VAC | 600VAC<br>Y/347VAC | Max.<br>Fuse or<br>MCCB | 240VAC   | 480VAC<br>Y/277VAC | 600VAC<br>Y/347VAC | Max.<br>Fuse or<br>MCCB |
|                                       | kA                                       | kA             | kA             | A                       | kA   | kA                 | kA                 | A                       | kA   | kA                 | kA                 | A                       |
| 0.63 - 1.0                            | 50                                       | 65             | 25             | 125                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 1.0 - 1.6                             | 50                                       | 65             | 25             | 125                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 1.6 - 2.5                             | 50                                       | 65             | 25             | 125                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 2.5 - 4.0                             | 50                                       | 65             | 25             | 125                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 4.0 - 6.3                             | 50                                       | 65             | 25             | 125                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 6.3 - 10                              | 50                                       | 65             | 25             | 125                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 10 - 16                               | 50                                       | 50             | 25             | 160                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 16 - 20                               | 50                                       | 50             | 25             | 250                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 20 - 25                               | 50                                       | 50             | 25             | 250                     | 50   | 50                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 25 - 32                               | 42                                       | 50             | 25             | 500                     | 42   | 42                 | 25                 | –                       | 100  | 100                | 50                 | –                       |
| 32 - 40                               | 20                                       | 20             | 5              | 520                     | –  | –                  | –                  | –                       | –  | –                  | –                  | –                       |

Note: Fuse or MCCB not required.

## Short-Circuit Interruption Capacity (IEC 60947-2) for MPW40

| Setting<br>Overload<br>Release<br>(A) | 220-230 VAC      |                  |                              | 380-415 VAC      |                  |                              | 440VAC           |                  |                              | 460-500 VAC      |                  |                              | 630-690 VAC      |                  |                              |
|---------------------------------------|------------------|------------------|------------------------------|------------------|------------------|------------------------------|------------------|------------------|------------------------------|------------------|------------------|------------------------------|------------------|------------------|------------------------------|
|                                       | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max.<br>Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max.<br>Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max.<br>Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max.<br>Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max.<br>Fuse<br>(RK5)<br>(A) |
| 0.63 - 1.0                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            |
| 1.0 - 1.6                             | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            |
| 1.6 - 2.5                             | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 8                | 8                | 25                           |
| 2.5 - 4.0                             | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 8                | 8                | 32                           |
| 4.0 - 6.3                             | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 100              | 100              | –                            | 8                | 8                | 50                           |
| 6.3 - 10                              | 100              | 100              | –                            | 100              | 100              | –                            | 50               | 25               | 80                           | 42               | 21               | 63                           | 8                | 8                | 50                           |
| 10 - 16                               | 100              | 100              | –                            | 50               | 25               | 100                          | 50               | 15               | 80                           | 10               | 8                | 80                           | 5                | 5                | 63                           |
| 16 - 20                               | 100              | 100              | –                            | 50               | 25               | 125                          | 50               | 15               | 80                           | 10               | 8                | 80                           | 5                | 5                | 63                           |
| 20 - 25                               | 100              | 100              | –                            | 50               | 25               | 125                          | 50               | 15               | 100                          | 10               | 8                | 80                           | 5                | 5                | 63                           |
| 25 - 32                               | 100              | 100              | –                            | 50               | 25               | 125                          | 25               | 15               | 100                          | 10               | 8                | 80                           | 5                | 5                | 63                           |
| 32 - 40                               | 100              | 100              | –                            | 50               | 25               | 125                          | 25               | 15               | 100                          | 10               | 8                | 80                           | 5                | 2                | 63                           |

Self-protected against short-circuits up to 100kA.

– Back-up fuse not required

1) Fuse required for greater short-circuit currents.



# MPW

## Technical Data

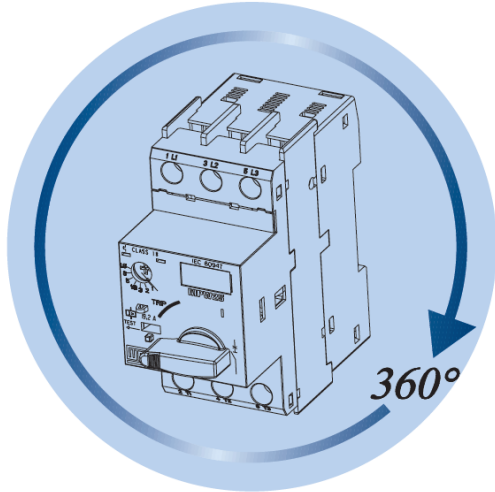
### Short-Circuit Interruption Capacity (IEC 60947-2) With Current Limiter (MPW40 + CLT32MPW40)

| Setting<br>Overload<br>Release<br>(A) | 380-415 VAC      |                  |                           | 440VAC           |                  |                           | 460-500 VAC      |                  |                           | 630-690 VAC      |                  |                           |
|---------------------------------------|------------------|------------------|---------------------------|------------------|------------------|---------------------------|------------------|------------------|---------------------------|------------------|------------------|---------------------------|
|                                       | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max. Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max. Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max. Fuse<br>(RK5)<br>(A) | $I_{cu}$<br>(kA) | $I_{cs}$<br>(kA) | Max. Fuse<br>(RK5)<br>(A) |
| 0.63 - 1.0                            | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         |
| 1.0 - 1.6                             | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         |
| 1.6 - 2.5                             | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         | 50               | 50               | –                         |
| 2.5 - 4.0                             | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         | 50               | 50               | –                         |
| 4.0 - 6.3                             | •                | •                | –                         | •                | •                | –                         | •                | •                | –                         | 50               | 50               | –                         |
| 6.3 - 10                              | •                | •                | –                         | 100              | 100              | –                         | 100              | 100              | –                         | 50               | 50               | –                         |
| 10 - 16                               | 100              | 100              | –                         | 100              | 100              | –                         | 100              | 100              | –                         | 50               | 50               | –                         |
| 16 - 20                               | 100              | 100              | –                         | 100              | 100              | –                         | 100              | 100              | –                         | 50               | 50               | –                         |
| 20 - 25                               | 100              | 100              | –                         | 100              | 100              | –                         | 100              | 100              | –                         | 10               | 10               | –                         |
| 25 - 32                               | 100              | 100              | –                         | 100              | 100              | –                         | 100              | 100              | –                         | 10               | 10               | –                         |

- Note: Self protected against short-circuits up to 100kA
- Back-up fuse not required
  - Not applicable due to MPW40 already having 100 kA of  $I_{cu}$  /  $I_{cs}$  in referred ranges.

# MPW Technical Data

## Mounting Position





# MPW Series Manual Motor Protectors



MPW40-3-U001

## Features (MPW40 Series)

- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 50kA@480VAC (25kA@600VAC)
- Fixed short-circuit release 13 times the maximum circuit breaker rated current
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

\* When associated with line side terminal LST25 and trip indicator TSB

## MPW40 Series Manual Motor Protectors Selection Guide

| Part Number                  | Price   | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Ratings for Group Installation |      | Drawing             |
|------------------------------|---------|-----------------------|-------|-------------|-------|-------|-------|---------------------|--|------|---------------------|
|                              |         | Single-Phase          |       | Three-Phase |       |       |       |                     | 480V   | 600V |                     |
|                              |         | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  |                     |  |      |                     |
| <a href="#">MPW40-3-U001</a> | \$54.00 | -                     | -     | -           | -     | 1/2   | 1/2   | 0.63 - 1.0          | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D016</a> | \$54.00 | -                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D025</a> | \$54.00 | -                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U004</a> | \$54.00 | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D063</a> | \$54.00 | -                     | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U010</a> | \$54.00 | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U016</a> | \$59.00 | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U020</a> | \$65.00 | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U025</a> | \$77.00 | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U032</a> | \$82.00 | -                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 42kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U040</a> | \$93.00 | -                     | 5     | 10          | 15    | 25    | -     | 32 - 40             | 20kA   | 5kA  | <a href="#">PDF</a> |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.



MPW80-3-U065

## Features (MPW80 Series)

- Designed to provide operation, overload and short circuit protection of electric motors
- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Fixed short-circuit release 13 times the maximum circuit breaker rated current
- Phase-failure sensitivity according to IEC 60947-4-1
- Can be used as main switch (IEC 60947-2)
- Short-circuit breaking capacity from 65kA up to 80A at 380 VAC according to IEC 60947-2
- Thermomagnetic Motor Protective Circuit Breaker with overload protection (class 10)
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

\* When associated with line side terminal LST65 and trip indicator TSB

## MPW80 Series Manual Motor Protectors Selection Guide

| Part Number                  | Price    | Maximum UL Horsepower |      |             |      |      |      | Thermal Setting (A) | Short-Circuit Ratings for Group Installation |      | Drawing             |
|------------------------------|----------|-----------------------|------|-------------|------|------|------|---------------------|--|------|---------------------|
|                              |          | Single-Phase          |      | Three-Phase |      |      |      |                     | 480V   | 600V |                     |
|                              |          | 115V                  | 230V | 200V        | 230V | 460V | 575V |                     |  |      |                     |
| <a href="#">MPW80-3-U040</a> | \$141.00 | 3                     | 7.5  | -           | 15   | 25   | 30   | 32-40               | 35kA   | 10kA | <a href="#">PDF</a> |
| <a href="#">MPW80-3-U050</a> | \$141.00 | -                     | 10   | 15          | 15   | 30   | 40   | 40-50               | 35kA   | 10kA | <a href="#">PDF</a> |
| <a href="#">MPW80-3-U065</a> | \$141.00 | 5                     | 10   | 20          | 20   | 50   | 60   | 50-65               | 35kA   | 10kA | <a href="#">PDF</a> |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.



# MPW Series Manual Motor Protectors



MPW40-3-U001

## Features (MPW40 Series)

- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 50kA@480VAC (25kA@600VAC)
- Fixed short-circuit release 13 times the maximum circuit breaker rated current
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

\* When associated with line side terminal LST25 and trip indicator TSB

## MPW40 Series Manual Motor Protectors Selection Guide

| Part Number                  | Price   | Maximum UL Horsepower |       |             |       |       |       | Thermal Setting (A) | Short-Circuit Ratings for Group Installation |      | Drawing             |
|------------------------------|---------|-----------------------|-------|-------------|-------|-------|-------|---------------------|--|------|---------------------|
|                              |         | Single-Phase          |       | Three-Phase |       |       |       |                     | 480V   | 600V |                     |
|                              |         | 115V                  | 230V  | 200V        | 230V  | 460V  | 575V  |                     |  |      |                     |
| <a href="#">MPW40-3-U001</a> | \$54.00 | –                     | –     | –           | –     | 1/2   | 1/2   | 0.63 - 1.0          | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D016</a> | \$54.00 | –                     | 1/10  | 1/4         | 1/3   | 3/4   | 1     | 1.0 - 1.6           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D025</a> | \$54.00 | –                     | 1/6   | 1/2         | 1/2   | 1-1/2 | 1-1/2 | 1.6 - 2.5           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U004</a> | \$54.00 | 1/8                   | 1/3   | 3/4         | 1     | 2     | 3     | 2.5 - 4.0           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-D063</a> | \$54.00 | –                     | 3/4   | 1-1/2       | 1-1/2 | 5     | 5     | 4.0 - 6.3           | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U010</a> | \$54.00 | 1/2                   | 1-1/2 | 3           | 3     | 7-1/2 | 10    | 6.3 - 10            | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U016</a> | \$59.00 | 1                     | 3     | 5           | 5     | 10    | 15    | 10 - 16             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U020</a> | \$65.00 | 1-1/2                 | 3     | 5           | 7-1/2 | 15    | 20    | 16 - 20             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U025</a> | \$77.00 | 2                     | 3     | 7-1/2       | 7-1/2 | 15    | 20    | 20 - 25             | 50kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U032</a> | \$82.00 | –                     | 5     | 10          | 10    | 20    | 25    | 25 - 32             | 42kA   | 25kA | <a href="#">PDF</a> |
| <a href="#">MPW40-3-U040</a> | \$93.00 | –                     | 5     | 10          | 15    | 25    | –     | 32 - 40             | 20kA   | 5kA  | <a href="#">PDF</a> |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.



MPW80-3-U065

## Features (MPW80 Series)

- Designed to provide operation, overload and short circuit protection of electric motors
- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Fixed short-circuit release 13 times the maximum circuit breaker rated current
- Phase-failure sensitivity according to IEC 60947-4-1
- Can be used as main switch (IEC 60947-2)
- Short-circuit breaking capacity from 65kA up to 80A at 380 VAC according to IEC 60947-2
- Thermomagnetic Motor Protective Circuit Breaker with overload protection (class 10)
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

\* When associated with line side terminal LST65 and trip indicator TSB

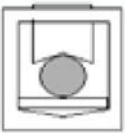

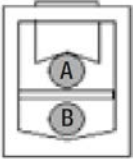
## MPW80 Series Manual Motor Protectors Selection Guide

| Part Number                  | Price    | Maximum UL Horsepower |      |             |      |      |      | Thermal Setting (A) | Short-Circuit Ratings for Group Installation |      | Drawing             |
|------------------------------|----------|-----------------------|------|-------------|------|------|------|---------------------|--|------|---------------------|
|                              |          | Single-Phase          |      | Three-Phase |      |      |      |                     | 480V   | 600V |                     |
|                              |          | 115V                  | 230V | 200V        | 230V | 460V | 575V |                     |  |      |                     |
| <a href="#">MPW80-3-U040</a> | \$141.00 | 3                     | 7.5  | –           | 15   | 25   | 30   | 32-40               | 35kA   | 10kA | <a href="#">PDF</a> |
| <a href="#">MPW80-3-U050</a> | \$141.00 | –                     | 10   | 15          | 15   | 30   | 40   | 40-50               | 35kA   | 10kA | <a href="#">PDF</a> |
| <a href="#">MPW80-3-U065</a> | \$141.00 | 5                     | 10   | 20          | 20   | 50   | 60   | 50-65               | 35kA   | 10kA | <a href="#">PDF</a> |

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.

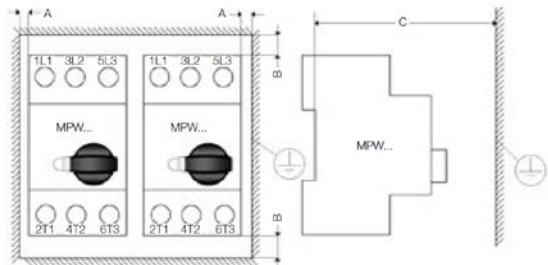


# MPW Series Manual Motor Protectors

| MPW80 Series Main Terminal Capacity Specifications  |                                 |  |
|---|---------------------------------|--|
| Connection  | Type                            | Cross-Section                              |
| <b>1 conductor connection on top only</b><br><br>    | Rigid Cable                     | 1 - 35 mm <sup>2</sup>                     |
|   | Cable Without Terminal/Ferrules | 1.5 - 35 mm <sup>2</sup>                   |
|   | Cable With Terminal/Ferrules    | 1 - 35 mm <sup>2</sup>                     |
|   | Flexible Cable                  | 1.5 - 35 mm <sup>2</sup><br>12 - 2 AWG     |
| <b>1 conductor connection on bottom only</b><br><br> | Rigid Cable                     | 2.5 - 35 mm <sup>2</sup>                   |
|   | Cable Without Terminal/Ferrules | 6 - 35 mm <sup>2</sup>                     |
|   | Cable With Terminal/Ferrules    | 2.5 - 35 mm <sup>2</sup>                   |
|   | Flexible Cable                  | 6 - 35 mm <sup>2</sup><br>12 - 2 AWG       |
| <b>Connection of 2 conductors</b><br><br>          | Rigid Cable                     | (A) 1 - 35 mm <sup>2</sup>                 |
|   |                                 | (B) 2.5 - 35 mm <sup>2</sup>               |
|   | Cable Without Terminal/Ferrules | (A) 1.5 - 35 mm <sup>2</sup>               |
|   |                                 | (B) 6 - 35 mm <sup>2</sup>                 |
|   | Cable With Terminal/Ferrules    | (A) 1 - 35 mm <sup>2</sup>                 |
|   |                                 | (B) 2.5 - 35 mm <sup>2</sup>               |
|   | Flexible Cable                  | (A) 1.5 - 35 mm <sup>2</sup><br>12 - 2 AWG |
|   |                                 | (B) 6 - 35 mm <sup>2</sup><br>12 - 2 AWG   |

## Mounting Configurations

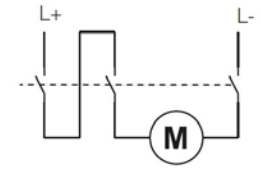
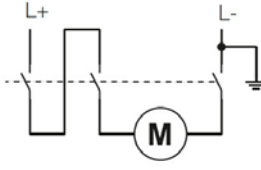
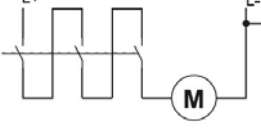
| MPW Series Mounting Configurations                       |                |   |           |            |
|--|----------------|---|-----------|------------|
| Live or Grounded Parts – Distance to the Circuit Breaker |                |   |           |            |
| Model  | U <sub>e</sub> | Minimum distance between the circuit breaker and live or grounded parts (mm [in]) |           |            |
|  |                | A   | B         | C          |
| MPW40  | Up to 500 V    | 9 [0.35]  | 30 [1.18] | 95 [3.74]  |
|  | Up to 690 V    | 30 [1.18]   | 50 [1.97] | 95 [3.74]  |
| MPW80  | Up to 690 V    | 10 [0.39]   | 50 [1.97] | 150 [5.91] |



The motor protective circuit breaker can be mounted in any position, but according to IEC 60447 standard, the “On - I” indicator must be to the right or up.

## DC Operation

The MPW40-MPW80 can also be used for operating continuous current loads. For such operation it is necessary to connect 2 or 3 poles in series. See recommended circuits and their voltage limits in the table below. Short-circuit breaking capacity I<sub>CU</sub> = 10kA for all configurations.

| MPW Series DC Operation  |             |   |
|--|-------------|---|
| Circuit  | Maximum VDC | Notes                                   |
|  | 150VDC      | System not grounded; 2 poles in series. |
|  | 300VDC      | System grounded; 2 poles in series.     |
|  | 450VDC      | System grounded; 3 poles in series.     |

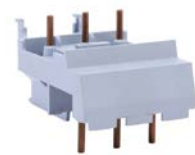




# MPW Series Manual Motor Protectors Accessories

## Accessories for MPW Series Manual Motor Protectors – Selection Guide

| Part Number  | Price   | Description   | Drawing                    |
|--|---------|---|----------------------------|
| <b>Auxiliary Contact Blocks</b>                        |         |   |                            |
| <a href="#"><u>ACBF-11</u></a>                         | \$8.25  | Field installable auxiliary contact, front mount, (1) N.O./1) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.                 | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ACBS-11</u></a>                         | \$9.00  | Field installable auxiliary contact, left side mount, (1) N.O./1) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.           | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ACBS-20</u></a>                         | \$9.00  | Field installable auxiliary contact, left side mount, (2) N.O. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.                   | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ACBS-02</u></a>                         | \$9.00  | Field installable auxiliary contact, left side mount, (2) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.                   | <a href="#"><u>PDF</u></a> |
| <b>Accessories for Combination Type-E Construction</b> |         |   |                            |
| <a href="#"><u>LST25</u></a>                           | \$17.00 | Incoming power terminal block, 3-pole, maximum current 63A, 20-8 AWG. For use with MPW40 series manual motor protectors. Required when using a MPW40 in a UL Type E application 32A and less. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>LST65</u></a>                           | \$32.00 | Incoming power terminal block, 3-pole, maximum current 120A, 8-4 AWG. For use with MPW80 series manual motor protectors.  |                            |
| <a href="#"><u>TSB</u></a>                             | \$15.00 | Field installable short circuit alarm contact, left side mount, (2) N.O./2) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.   | <a href="#"><u>PDF</u></a> |
| <b>Current Limiter</b>                                 |         |   |                            |
| <a href="#"><u>CLT32MPW40</u></a>                      | \$45.00 | Current limiter, 35mm DIN rail mount. For use with MPW40 series manual motor protectors.  | <a href="#"><u>PDF</u></a> |
| <b>Link Modules</b>                                    |         |   |                            |
| <a href="#"><u>ECCMP-C0</u></a>                        | \$8.50  | Link module, for use with MPW40 protectors and CWC07 through CWC016 series miniature contactors with AC or DC coils. Not for use with 4-Pole CWC series miniature contactors.                 | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-C025</u></a>                      | \$8.50  | Link module, for use with MPW40 protectors and CWC025 series miniature contactors with AC coils. Not for use with 4-Pole CWC series miniature contactors.                                     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-40B38</u></a>                     | \$10.00 | Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with AC coils.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-40B38DC</u></a>                   | \$10.00 | Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with DC coils.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>ECCMP-80B80</u></a>                     | \$35.50 | Link module, for use with MPW80 protectors and CWB40 through CWB80 series contactors with AC and DC coils.  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>EC-R3</u></a>                           | \$38.50 | Reversing connection kit, for use with CWB95 to CWB125 series contactors. Line and loadside connection bars included.   | <a href="#"><u>PDF</u></a> |

**ACBF-11****ACBS-11****ACBS-20****ACBS-02****LST25****TSB****CLT32MPW40****ECCMP-C0****ECCMP-C025****ECCMP-40B38****ECCMP-40B38DC**



# MPW Series Manual Motor Protectors

## Accessories, continued

**RMMP-130****MRX-130****MRX-130E****MRX-330****MRX-330E****MRX65-130****MRX65-130E**

| Accessories for MPW Series Manual Motor Protectors – Selection Guide |         |  |                            |
|--|---------|--|----------------------------|
| Part Number  | Price   | Description  | Drawing                    |
| <b>Through-the-Door Rotary Mechanisms</b>                            |         |  |                            |
| <a href="#"><u>RMMP-130</u></a>                                      | \$28.50 | Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.                              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>RMMP-130E</u></a>                                     | \$28.50 | Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.                              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>RMMP-330</u></a>                                      | \$34.50 | Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.                              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>RMMP-330E</u></a>                                     | \$34.50 | Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.                              | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-130</u></a>                                       | \$42.50 | Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.                  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-130E</u></a>                                      | \$42.50 | Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.                  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-330</u></a>                                       | \$46.50 | Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.                  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX-330E</u></a>                                      | \$46.50 | Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.                  | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX65-130</u></a>                                     | \$45.00 | Rotary handle, selector, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 130mm shaft included. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX65-130E</u></a>                                    | \$45.00 | Rotary handle, selector, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 130mm shaft included. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX65-330</u></a>                                     | \$48.50 | Rotary handle, selector, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 330mm shaft included. | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>MRX65-330E</u></a>                                    | \$48.50 | Rotary handle, selector, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 330mm shaft included. | <a href="#"><u>PDF</u></a> |
| <b>Under Voltage and Shunt Trip Releases</b>                         |         |  |                            |
| <a href="#"><u>SRMPD51</u></a>                                       | \$22.50 | Field installable shunt trip, right side mount, 20-24 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 and MPW80 series manual motor protectors.                                     | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>SRMPD59</u></a>                                       | \$22.50 | Field installable shunt trip, right side mount, 100-127 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 and MPW80 series manual motor protectors.                                   | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>SRMPD65</u></a>                                       | \$22.50 | Field installable shunt trip, right side mount, 200-240 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 and MPW80 series manual motor protectors.                                   | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV18</u></a>                                       | \$22.50 | Field installable undervoltage trip device, right side mount, 110 VAC (50Hz)/120 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.           | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV23</u></a>                                       | \$22.50 | Field installable undervoltage trip device, right side mount, 180 VAC (50Hz)/208 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.           | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV30</u></a>                                       | \$22.50 | Field installable undervoltage trip device, right side mount, 208 VAC (50Hz)/240 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.           | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV37</u></a>                                       | \$22.50 | Field installable undervoltage trip device, right side mount, 230-240 VAC (50Hz)/240-277 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.   | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPV47</u></a>                                       | \$22.50 | Field installable undervoltage trip device, right side mount, 400-415 VAC (50Hz)/480 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.       | <a href="#"><u>PDF</u></a> |
| <a href="#"><u>URMPD02</u></a>                                       | \$22.50 | Field installable undervoltage trip device, right side mount, 24 VAC (50/60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.                        | <a href="#"><u>PDF</u></a> |