

# Schneider Electric Easy TeSys Contactors

**DPE09BL****DPE18BL****DPE38BL**

Schneider Electric's Easy TeSys Series Contactors provide an easy solution for OEMs, panel builders, contractors and system integrators who have a need for motor control, resistive load switching, and isolation applications. They are well suited for use in a wide range of applications:

- Conveyors
- Packaging
- Pumps
- Compressors
- HVAC
- Refrigeration
- Furnace applications
- Similar applications

Easy TeSys contactors have an operational life of approximately 1 million electrical operations, plus UL/CSA-approved rated current up to 52A and 25HP/600VAC.

They are suitable for the utilization categories specified in standard IEC 60947:

- AC-1: Non-inductive loads or slightly inductive loads, resistance furnaces
- AC-3: Squirrel cage motors – motor starting and breaking while running.  
Example: Standard squirrel cage motors, pumps, and fans.
- AC-4: Squirrel cage or slip ring motors – applications with reverse current braking and inching.
- AC-8a: Control of sealed refrigeration compressor motors with manual reset of overload trips.
- AC-8b: Control of sealed refrigeration compressor motors with automatic reset of overload trips.

## Easy TeSys 3-Pole Contactors Selection Guide

| Part Number             | Price   | Coil voltage | HP  | Weight lb [kg] | Drawing             |
|-------------------------|---------|--------------|-----|----------------|---------------------|
| <a href="#">DPE09B7</a> | \$29.50 | 24VAC        | 3   | 0.705 [0.320]  | <a href="#">PDF</a> |
| <a href="#">DPE09BL</a> | \$35.00 | 24VDC        |     |                | <a href="#">PDF</a> |
| <a href="#">DPE09G7</a> | \$29.50 | 120VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE09U7</a> | \$29.50 | 240VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE12B7</a> | \$33.50 | 24VAC        | 5   | 0.717 [0.325]  | <a href="#">PDF</a> |
| <a href="#">DPE12BL</a> | \$36.00 | 24VDC        |     |                | <a href="#">PDF</a> |
| <a href="#">DPE12G7</a> | \$33.50 | 120VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE12U7</a> | \$33.50 | 240VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE18B7</a> | \$43.50 | 24VAC        | 7.5 | 0.728 [0.330]  | <a href="#">PDF</a> |
| <a href="#">DPE18BL</a> | \$48.00 | 24VDC        |     |                | <a href="#">PDF</a> |
| <a href="#">DPE18G7</a> | \$43.50 | 120VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE18U7</a> | \$43.50 | 240VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE25B7</a> | \$55.00 | 24VAC        | 10  | 0.816 [0.370]  | <a href="#">PDF</a> |
| <a href="#">DPE25BL</a> | \$58.00 | 24VDC        |     |                | <a href="#">PDF</a> |
| <a href="#">DPE25G7</a> | \$55.00 | 120VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE25U7</a> | \$55.00 | 240VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE32B7</a> | \$73.00 | 24VAC        | 15  | 0.827 [0.375]  | <a href="#">PDF</a> |
| <a href="#">DPE32BL</a> | \$76.00 | 24VDC        |     |                | <a href="#">PDF</a> |
| <a href="#">DPE32G7</a> | \$73.00 | 120VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE32U7</a> | \$73.00 | 240VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE38B7</a> | \$73.00 | 24VAC        | 20  | 0.838 [0.380]  | <a href="#">PDF</a> |
| <a href="#">DPE38BL</a> | \$76.00 | 24VDC        |     |                | <a href="#">PDF</a> |
| <a href="#">DPE38G7</a> | \$73.00 | 120VAC       |     |                | <a href="#">PDF</a> |
| <a href="#">DPE38U7</a> | \$73.00 | 240VAC       |     |                | <a href="#">PDF</a> |



UL file # E164862  
CSA file # 164581

# Schneider Electric Easy TeSys Contactors



| Easy TeSys 3-Pole Contactors<br>Utilization Category AC-3 |                                                                                                                         |                     |              |              |              |                      |                                    |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|--------------|--------------|----------------------|------------------------------------|
| Part Number                                               | Standard Power Ratings of 3-Phase Motors<br>50/60 Hz ( $\Theta \leq 140^{\circ}\text{F}$ [ $60^{\circ}\text{C}$ ]) [kW] |                     |              |              |              |                      | Instantaneous<br>Auxiliary Contact |
|                                                           | 220V<br>230V                                                                                                            | 380V<br>400<br>(kW) | 415V<br>(kW) | 440V<br>(kW) | 500V<br>(kW) | 660V<br>690V<br>(kW) |                                    |
|                                                           |                                                                                                                         |                     |              |              |              |                      |                                    |
| DPE09xx                                                   | 2.2                                                                                                                     | 4                   | 4            | 4            | 5.5          | 5.5                  | 9                                  |
| DPE12xx                                                   | 3                                                                                                                       | 5.5                 | 5.5          | 5.5          | 7.5          | 7.5                  | 12                                 |
| DPE18xx                                                   | 4                                                                                                                       | 7.5                 | 9            | 9            | 10           | 10                   | 18                                 |
| DPE25xx                                                   | 5.5                                                                                                                     | 11                  | 11           | 11           | 15           | 15                   | 25                                 |
| DPE32xx                                                   | 7.5                                                                                                                     | 15                  | 15           | 15           | 18.5         | 18.5                 | 32                                 |
| DPE38xx                                                   | 9                                                                                                                       | 18.5                | 18.5         | 18.5         | 18.5         | 18.5                 | 38                                 |

| Easy TeSys 3-Pole Contactors<br>Conforming to UL and CSA Standards<br>(North American Market) |                                                                            |              |              |              |              |              |                                                |                              |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|------------------------------------------------|------------------------------|
| Part<br>Number                                                                                | Standard Power Ratings of 3-Phase Motors<br>50/60 Hz (Θ<140°F [60°C]) [hp] |              |              |              |              |              | Associated<br>Cable Type<br>75°C - Cu<br>[AWG] | Continuous<br>Current<br>[A] |
|                                                                                               | 115V                                                                       | 230V<br>240V | 200V<br>208V | 230V<br>240V | 460V<br>480V | 575V<br>600V |                                                |                              |
|                                                                                               | Single-phase                                                               |              | 3-phase      |              |              |              |                                                |                              |
| DPE09xx                                                                                       | 1/3                                                                        | 1            | 2            | 2            | 3            | 7.5          | 18 - 10                                        | 20                           |
| DPE12xx                                                                                       | 1/3                                                                        | 1            | 2            | 2            | 5            | 7.5          |                                                | 25                           |
| DPE18xx                                                                                       | 1/2                                                                        | 2            | 3            | 3            | 7.5          | 10           |                                                | 25                           |
| DPE25xx                                                                                       | 1                                                                          | 3            | 5            | 5            | 10           | 15           | 18 - 8                                         | 32                           |
| DPE32xx                                                                                       | 2                                                                          | 3            | 7.5          | 7.5          | 15           | 20           | 14 - 6                                         | 40                           |
| DPE38xx                                                                                       | 2                                                                          | 5            | 10           | 10           | 20           | 25           |                                                | 52                           |

| Utilization category AC-1 |                                                                                                             |                                    |
|---------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------|
| Part Number 1, 2          | Non-Inductive Loads Maximum Current<br>( $\Theta \leq 140^{\circ}\text{F}$ [ $60^{\circ}\text{C}$ ])<br>(A) | Instantaneous<br>Auxiliary Contact |
| DPE09xx                   | 20                                                                                                          | 1                                  |
| DPE12xx                   | 25                                                                                                          | 1                                  |
| DPE18xx                   | 32                                                                                                          | 1                                  |
| DPE25xx                   | 40                                                                                                          | 1                                  |
| DPE32xx                   | 50                                                                                                          | 1                                  |
| DPE38xx                   | 50                                                                                                          | 1                                  |

| Coil Voltages and Code |          |           |           |
|------------------------|----------|-----------|-----------|
| AC Supply (V)          |          |           |           |
| Volts<br>50/60 Hz      | 24<br>B7 | 120<br>G7 | 240<br>U7 |
| DC Supply <sup>3</sup> |          |           |           |
| Volts                  | 24<br>BL |           |           |

## Notes:

1) The weights indicated are for contactors with AC control circuit. For DC or low consumption control circuit, add 0.160 kg for part numbers DPE09xx to DPE38xx.

(2) Built-in suppression device (bi-directional peak limiting diode).

(3) BL is for part numbers DPE09xx through DPE38xx.

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| Environmental Characteristics                         |                                                                               |                                                                |  |                 |
|-------------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------|--|-----------------|
| Contactor Type                                        |                                                                               | DPE09xx-DPE25xx                                                |  | DPE32xx-DPE38xx |
| Rated Insulation Voltage ( $U_I$ )                    | Conforming to IEC 60947-4-1, Overvoltage category III, Degree of pollution: 3 | 690V                                                           |  |                 |
|                                                       | Conforming to UL, CSA                                                         | 600V                                                           |  |                 |
| Rated Impulse Withstand Voltage ( $U_{imp}$ )         | Conforming to IEC 60947                                                       | 6kV                                                            |  |                 |
| Conforming to Standards                               |                                                                               | IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1        |  |                 |
| Product Certifications                                |                                                                               | UL E164862, CSA 164581                                         |  |                 |
| Degree of Protection <sup>1</sup> (Front Face Only)   | Power Connection                                                              | Protection against direct finger contact IP 2X                 |  |                 |
|                                                       | Coil Connection                                                               | Protection against direct finger contact IP 2X                 |  |                 |
| IP Degree of Protection                               | Conforming to IEC 60529                                                       | IP20                                                           |  |                 |
| Ambient Air Temperature Around the Device             | Storage                                                                       | -76 to 176°F [-60 to 80°C]                                     |  |                 |
|                                                       | Operation                                                                     | 23 to 140°F [-5 to 60°C]                                       |  |                 |
|                                                       | Permissible                                                                   | 140 to 158°F [60 to 70°C], for operation at $U_c$              |  |                 |
| Maximum Operating Altitude                            | Without derating                                                              | 6561.68 ft [2000m]                                             |  |                 |
| Operating Positions                                   | Without derating                                                              | ±30° occasional, in relation to normal vertical mounting plane |  |                 |
| Flame Resistance                                      | Conforming to UL 95                                                           | V1                                                             |  |                 |
|                                                       | Conforming to IEC 60695-2-1                                                   | 1562°F [850°C]                                                 |  |                 |
| Shock Resistance <sup>2</sup><br>1/2 Sine Wave = 11ms | Contactor open                                                                | 8gn                                                            |  | 6.4 gn          |
|                                                       | Contactor closed                                                              | 12gn                                                           |  | 12gn            |
| Vibration Resistance <sup>2</sup><br>5 - 300 Hz       | Contactor open                                                                | 1.6 gn                                                         |  | 1.6 gn          |
|                                                       | Contactor closed                                                              | 3.2 gn                                                         |  | 3.2 gn          |

| Power Circuit Connection Characteristics (Connection by Cable) |                    |                            |         |          |          |
|----------------------------------------------------------------|--------------------|----------------------------|---------|----------|----------|
| Contactor Type                                                 |                    | DPE09xx - DPE18xx          | DPE25xx | DPE32xx  | DPE38xx  |
| Wire Size and Tightening Torque (Screw Terminals)              |                    |                            |         |          |          |
| Flexible Cable Without Cable End [mm <sup>2</sup> ]            | 1 conductor        | 1 - 4                      | 1.5 - 6 | 1.5 - 10 | 2.5 - 10 |
|                                                                | 2 conductor        | 1 - 4                      | 1.5 - 6 | 1.5 - 6  | 2.5 - 10 |
| Flexible Cable With Cable Ends [mm <sup>2</sup> ]              | 1 conductor        | 1 - 4                      | 1 - 6   | 1 - 6    | 1 - 10   |
|                                                                | 2 conductor        | 1 - 2.5                    | 1 - 4   | 1 - 4    | 1.5 - 6  |
| Solid Cable Without Cable Ends [mm <sup>2</sup> ]              | 1 conductor        | 1 - 4                      | 1.5 - 6 | 1.5 - 6  | 1.5 - 10 |
|                                                                | 2 conductor        | 1 - 4                      | 1.5 - 6 | 1.5 - 6  | 2.5 - 10 |
| Screwdriver                                                    | Philips            | No. 2                      |         |          |          |
|                                                                | Flat screwdriver Ø | Ø6                         |         |          |          |
| Tightening Torque                                              |                    | 15.05 Lbf • in [1.7 N • m] |         |          |          |
| AWG                                                            |                    | 14 - 6                     |         |          |          |

| Control Circuit Connection Characteristics (Screw Clamp Connections) |                    |                            |         |                           |         |
|----------------------------------------------------------------------|--------------------|----------------------------|---------|---------------------------|---------|
| Contactor Type                                                       |                    | DPE09xx - DPE18xx          | DPE25xx | DPE32xx                   | DPE38xx |
| Wire Size and Tightening Torque (Screw Clamp Connections)            |                    |                            |         |                           |         |
| Flexible Cable Without Cable End [mm <sup>2</sup> ]                  | 1 conductor        | 1 - 4                      | 1 - 4   | 1 - 4                     | 1 - 4   |
|                                                                      | 2 conductor        | 1 - 4                      | 1 - 4   | 1 - 4                     | 1 - 4   |
| Flexible Cable With Cable Ends [mm <sup>2</sup> ]                    | 1 conductor        | 1 - 4                      | 1 - 4   | 1 - 4                     | 1 - 4   |
|                                                                      | 2 conductor        | 1 - 2.5                    | 1 - 2.5 | 1 - 2.5                   | 1 - 2.5 |
| Solid Cable Without Cable Ends [mm <sup>2</sup> ]                    | 1 conductor        | 1 - 4                      | 1 - 4   | 1 - 4                     | 1 - 4   |
|                                                                      | 2 conductor        | 1 - 4                      | 1 - 4   | 1 - 4                     | 1 - 4   |
| Screwdriver                                                          | Philips            | No. 2                      |         |                           |         |
|                                                                      | Flat screwdriver Ø | Ø6                         |         |                           |         |
| Tightening Torque                                                    |                    | 15.05 Lbf • in [1.7 N • m] |         | 22.13 Lbf • in [2.5N • m] |         |
| AWG                                                                  |                    | 10 - 18                    |         |                           |         |

## Notes:

(1) Protection provided for the cabling c.s.a. and for connection by cable.

(2) Without modifying the contact states, in the most unfavorable direction (coil energized at  $U_e$ ).

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| Power Circuit Characteristics                                                                                                               |                                                                     |                            |         |         |         |         |         |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------|---------|---------|---------|---------|---------|
| Contactor Type                                                                                                                              |                                                                     | DPE09xx                    | DPE12xx | DPE18xx | DPE25xx | DPE32xx | DPE38xx |
| Rated Operational Current ( $I_e$ )<br>( $U_e \leq 440$ V)                                                                                  | In AC-3, $\theta \leq 140^\circ\text{F}$ ( $60^\circ\text{C}$ ) (A) | 9                          | 12      | 18      | 25      | 32      | 38      |
|                                                                                                                                             | In AC-1, $\theta \leq 140^\circ\text{F}$ ( $60^\circ\text{C}$ ) (A) | 20                         | 25      | 32      | 40      | 50      | 50      |
| Electrical Durability<br>At Rated Operational Current                                                                                       | @ 600V                                                              | 1 million operation cycles |         |         |         |         |         |
| Rated Operational Voltage ( $U_e$ )                                                                                                         | Up to... (V)                                                        | 690                        |         |         |         |         |         |
| Frequency Limits of the Operating Current                                                                                                   | (Hz)                                                                | 25 - 400                   |         |         |         |         |         |
| Conventional Thermal Current ( $I_{th}$ )                                                                                                   | $\theta 140^\circ\text{F}$ [ $60^\circ\text{C}$ ] (A)               | 25                         | 25      | 32      | 40      | 50      | 50      |
| Rated Making Capacity (400V)                                                                                                                | Conforming to IEC 60947                                             | 250                        | 250     | 300     | 450     | 550     | 550     |
| Rated Breaking Capacity (400V)                                                                                                              | Conforming to IEC 60947                                             | 250                        | 250     | 300     | 450     | 550     | 550     |
| Permissible Short Time Rating<br>No current flowing for preceding 15<br>minutes with $\theta \leq 104^\circ\text{F}$ [ $40^\circ\text{C}$ ] | For 1s (A)                                                          | 210                        | 210     | 240     | 380     | 430     | 430     |
|                                                                                                                                             | For 10s (A)                                                         | 105                        | 105     | 145     | 240     | 260     | 310     |
|                                                                                                                                             | For 1min (A)                                                        | 61                         | 61      | 84      | 120     | 138     | 150     |
|                                                                                                                                             | For 10min (A)                                                       | 30                         | 30      | 40      | 50      | 60      | 60      |
| Protection By Fuses<br>Short-Circuit Protection<br>$U \leq 690$ V                                                                           | Without thermal<br>overload relay,<br>gG fuse                       | Type 1 (A)                 | 25      | 40      | 50      | 63      | 63      |
|                                                                                                                                             |                                                                     | Type 2 (A)                 | 20      | 25      | 35      | 40      | 63      |
| Average Impedance Per Pole                                                                                                                  | At $I_{th}$ and 50Hz (m $\Omega$ )                                  | 2.5                        | 2.5     | 2.5     | 2       | 2       | 2       |
| Power Dissipated Per Pole for the Above<br>Operational Currents                                                                             | AC-3 (W)                                                            | 0.20                       | 0.36    | 0.8     | 1.25    | 2       | 3       |
|                                                                                                                                             | AC-1 (W)                                                            | 1.56                       | 1.56    | 2.5     | 3.2     | 5       | 5       |

| Applications With High-Fault Short-Circuit Current Ratings    |                 |                 |                                     |
|---------------------------------------------------------------|-----------------|-----------------|-------------------------------------|
| High Fault Short-Circuit Current Rating With Fuses            |                 |                 |                                     |
| Part Number                                                   | Maximum Current | Maximum Voltage | Maximum Class J Fuse Size           |
| DPE09xx                                                       | 100kA           | 600VAC          | 25A                                 |
| DPE12xx                                                       |                 |                 | 25A                                 |
| DPE18xx                                                       |                 |                 | 30A                                 |
| DPE25xx                                                       |                 |                 | 40A                                 |
| DPE32xx                                                       |                 |                 | 60A                                 |
| DPE38xx                                                       |                 |                 | 80A                                 |
| High Fault Short-Circuit Current Rating With Circuit Breakers |                 |                 |                                     |
| Part Number                                                   | Maximum Current | Maximum Voltage | Maximum Listed Circuit Breaker Size |
| DPE09xx                                                       | 35kA            | 480VAC          | 35A                                 |
| DPE12xx                                                       |                 |                 | 35A                                 |
| DPE18xx                                                       |                 |                 | 35A                                 |
| DPE25xx                                                       |                 |                 | 60A                                 |
| DPE32xx                                                       |                 |                 | 60A                                 |
| DPE38xx                                                       |                 |                 | 60A                                 |
| High Fault Short-Circuit Current Rating With Circuit Breakers |                 |                 |                                     |
| Part Number                                                   | Maximum Current | Maximum Voltage | Maximum Listed Circuit Breaker Size |
| DPE09xx                                                       | 18kA            | 600VAC          | 35A                                 |
| DPE12xx                                                       |                 |                 | 35A                                 |
| DPE18xx                                                       |                 |                 | 35A                                 |
| DPE25xx                                                       |                 |                 | 35A                                 |
| DPE32xx                                                       |                 |                 | 60A                                 |
| DPE38xx                                                       |                 |                 | 60A                                 |

# Schneider Electric Easy TeSys Contactors



## Control Circuit Characteristics, AC at 140°F [60°C] Supply

| Contactor Type                                              |      |                       |               | DPE09xx - DPE38xx              |                                                                          |
|-------------------------------------------------------------|------|-----------------------|---------------|--------------------------------|--------------------------------------------------------------------------|
| Rated Control Circuit Voltage ( $U_C$ )                     |      |                       | 50/60 Hz      |                                | 24 - 240 VAC                                                             |
| Control Voltage Limits                                      |      | Coils 50/60 Hz        | Operation     |                                | 0.9 - 1.1 $U_C$ at 50HZ and 0.85 - 1.1 $U_C$ at 60Hz and at 140°F [60°C] |
|                                                             |      |                       | Drop-out      |                                |                                                                          |
| Average Consumption at 68°F (20°C) and at $U_C$             | 50Hz | Inrush                | CosΦ          | 0.75                           |                                                                          |
|                                                             |      |                       | 50/60 Hz coil | 70VA                           |                                                                          |
|                                                             |      | Sealed                | CosΦ          | 0.3                            |                                                                          |
|                                                             |      |                       | 50/60 Hz coil | 7 VA                           |                                                                          |
|                                                             | 60Hz | Inrush                | CosΦ          | 0.75                           |                                                                          |
|                                                             |      |                       | 50/60 Hz coil | 70VA                           |                                                                          |
|                                                             |      | Sealed                | CosΦ          | 0.3                            |                                                                          |
|                                                             |      |                       | 50/60 Hz coil | 7.5 VA                         |                                                                          |
| Heat Dissipation                                            |      | 50/60 Hz coil         |               | 2 - 3 W                        |                                                                          |
| Operating Time <sup>1,2</sup>                               |      | Closing "C"           |               | 12 - 22 ms                     |                                                                          |
|                                                             |      | Opening "O"           |               | 4 - 19 ms                      |                                                                          |
| Mechanical Durability                                       |      | 50 or 60 Hz coils     |               | —                              |                                                                          |
|                                                             |      | 50/60 Hz coil at 60Hz |               | 10 million operating cycles    |                                                                          |
| Maximum Operating Rate at Ambient Temperature ≤140°F [60°C] |      |                       |               | 3600 operating cycles per hour |                                                                          |

(1) The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles.

(2) The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.

## Control Circuit Characteristics, DC Supply

| Contactor Type                                              |                           |             | DPE09xx - DPE38xx                |
|-------------------------------------------------------------|---------------------------|-------------|----------------------------------|
| Rated Control Circuit Voltage ( $U_c$ )                     |                           |             | 24V                              |
| Rated Insulation Voltage                                    | Conforming to IEC 60947-1 |             | 690V                             |
|                                                             | Conforming to UL, CSA     |             | 600V                             |
| Control Voltage Limits                                      | Operation                 |             | 0.7 - 1.25 $U_c$ at 140°F [60°C] |
|                                                             | Dropout                   |             | 0.1 - 0.25 $U_c$ at 140°F [60°C] |
| Average Consumption at 68°F [20°C] and at $U_c$             | Inrush                    |             | 5.4 W                            |
|                                                             | Sealed                    |             | 5.4 W                            |
| Operating Time <sup>1</sup>                                 | Closing "C"               |             | 63ms ± 15%                       |
|                                                             | Opening "O"               |             | 63ms ± 15%                       |
| Time Constant (L/R)                                         |                           | Closing "C" | 28ms                             |
| Mechanical Durability at $U_c$                              |                           |             | 30 million operating cycles      |
| Maximum Operating Rate at Ambient Temperature ≤140°F [60°C] |                           |             | 3600 operating cycles per hour   |

(1) The arcing time depends on the circuit switched by the poles. For all normal 3-phase applications, the arcing time is less than 10ms. The load is isolated from the supply after a time equal to the sum of the opening time and the arcing time.

## Characteristics of Auxiliary Contacts Incorporated in the Contactor

|                                                                                          |                           |                                                                                        |
|------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------|
| Rated Operational Voltage ( $U_c$ )                                                      |                           | Up to 690V                                                                             |
| Rated Insulation Voltage ( $U_i$ )                                                       | Conforming to IEC 60947-1 | 690V                                                                                   |
|                                                                                          | Conforming to UL, CSA     | 600V                                                                                   |
| Conventional Thermal Current Ith For Ambient Temperature $\leq 140^\circ\text{F}$ [60°C] |                           | 10A                                                                                    |
| Frequency of the Operational Current                                                     |                           | 25 - 400 Hz                                                                            |
| Minimum Switching Capacity $\lambda=10^{-8}$                                             | U min                     | 17V                                                                                    |
|                                                                                          | I min                     | 5mA                                                                                    |
| Short-Circuit Protection Conforming to IEC 60947-5-1                                     |                           | gG fuse: 10A                                                                           |
| Rated Making Capacity Conforming to IEC 60947-5-1, I rms                                 |                           | 140 - 250 A                                                                            |
| Short-Time Rating                                                                        |                           | Permissible for 1s: 100A<br>Permissible for 500ms: 120A<br>Permissible for 100ms: 140A |
| Insulation Resistance                                                                    |                           | >10M $\Omega$                                                                          |

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## Rated Operational Power of Auxiliary Contacts (Conforming to IEC 60947-5-1)

### AC Supply, Categories AC-14 and AC-15

Electrical durability (valid for up to 3600 operating cycles/hour)  
on an inductive load such as the coil of an electromagnet:  
Making power ( $\cos \varphi 0.7$ ) = 10 times the power broken ( $\cos \varphi 0.4$ ).

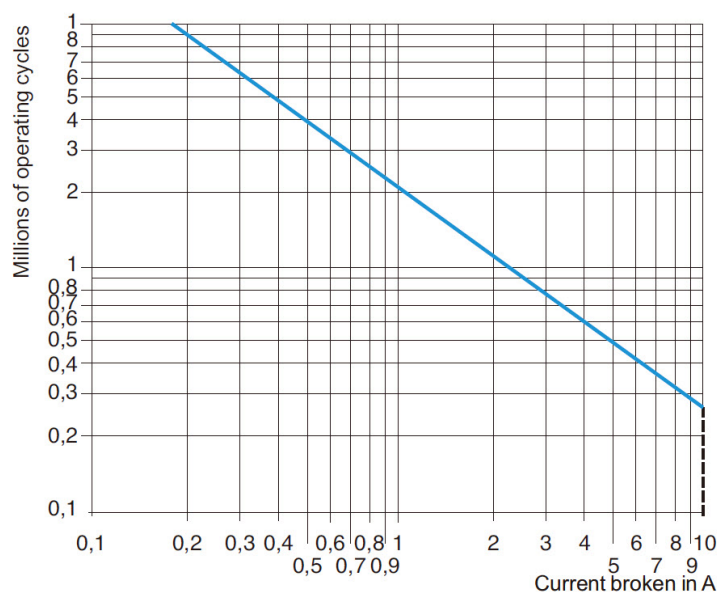
| Operating Cycles            | V  | 24 | 48  | 115 | 230 | 400 | 440  | 600  |
|-----------------------------|----|----|-----|-----|-----|-----|------|------|
| 1 million operating cycles  | VA | 60 | 120 | 280 | 560 | 960 | 1050 | 1440 |
| 3 million operating cycles  | VA | 16 | 32  | 80  | 160 | 280 | 300  | 420  |
| 10 million operating cycles | VA | 4  | 8   | 20  | 40  | 70  | 80   | 100  |

### DC Supply, Category DC-13

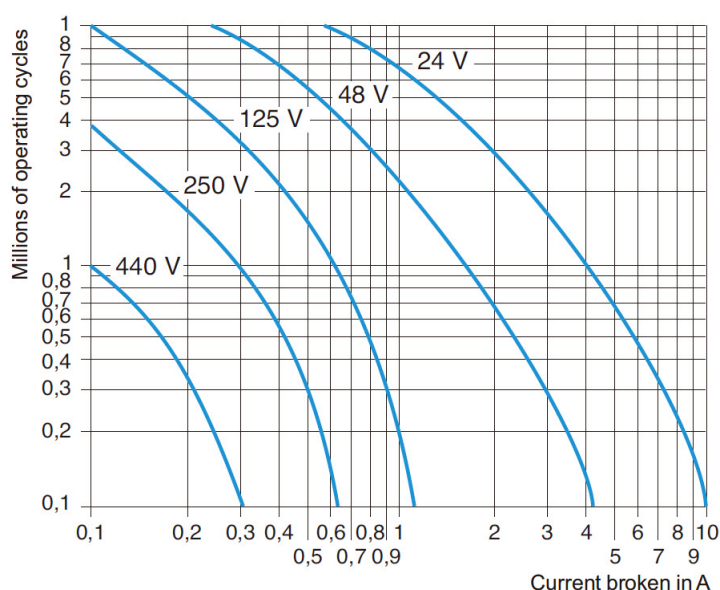
Electrical durability (valid for up to 1200 operating cycles/hour) on an inductive load such as the coil of an electromagnet, without economy resistor, the time constant increasing with the power.

| Operating Cycles            | V  | 24 | 48 | 125 | 250 | 440 |
|-----------------------------|----|----|----|-----|-----|-----|
| 1 million operating cycles  | VA | 96 | 76 | 76  | 76  | 44  |
| 3 million operating cycles  | VA | 48 | 38 | 38  | 32  | —   |
| 10 million operating cycles | VA | 14 | 12 | 12  | —   | —   |

## AC-15



## DC-13



# Schneider Electric Easy TeSys Contactors

## Auxiliary Contact Block



| Easy TeSys Auxiliary Contact Block Selection Guide |         |                                               |                              |                |                     |
|----------------------------------------------------|---------|-----------------------------------------------|------------------------------|----------------|---------------------|
| Part Number                                        | Price   | Description                                   | Number of Contacts Per Block | Weight lb [kg] | Drawing             |
| <a href="#">DPEAN11</a>                            | \$13.00 | Auxiliary contact block, clip on, front mount | 2<br>(1 NO and 1 NC)         | 0.066 [0.030]  | <a href="#">PDF</a> |

**DPEAN11**

| Auxiliary Contact Block Environmental Characteristics<br>(For Use in Normal Operating Environments)         |                                                                                   |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Conforming to Standards                                                                                     | IEC 60947-5-1, NF C 63-140, EN 60947-5-1, UL 60947-5-1 and CSA C22.2 No.60947-5-1 |
| Product Certifications                                                                                      | UL, CSA                                                                           |
| Protective Treatment                                                                                        | Conforming to IEC 60068                                                           |
| Degree of Protection (Conforming to VDE 0106)                                                               | Protection against direct finger contact IP 2X                                    |
| Ambient Air Temperature Around the Device                                                                   | Storage: -76 to 176°F [-60 to 80°C]                                               |
|                                                                                                             | Operation: 23 to 140°F [-5 to 60°C]                                               |
|                                                                                                             | Permissible for operation at U <sub>c</sub> : -40 to 158°F [-40 to 70°C]          |
| Maximum Operating Altitude Without Derating                                                                 | 6561.28 ft [2000m]                                                                |
| Connection By Cable<br>Philips No. 2 and Ø 0.236 (6mm)<br>Flexible or Rigid Cable With or Without Cable End | Minimum 1x1 mm <sup>2</sup><br>Maximum 2x2.5 mm <sup>2</sup>                      |

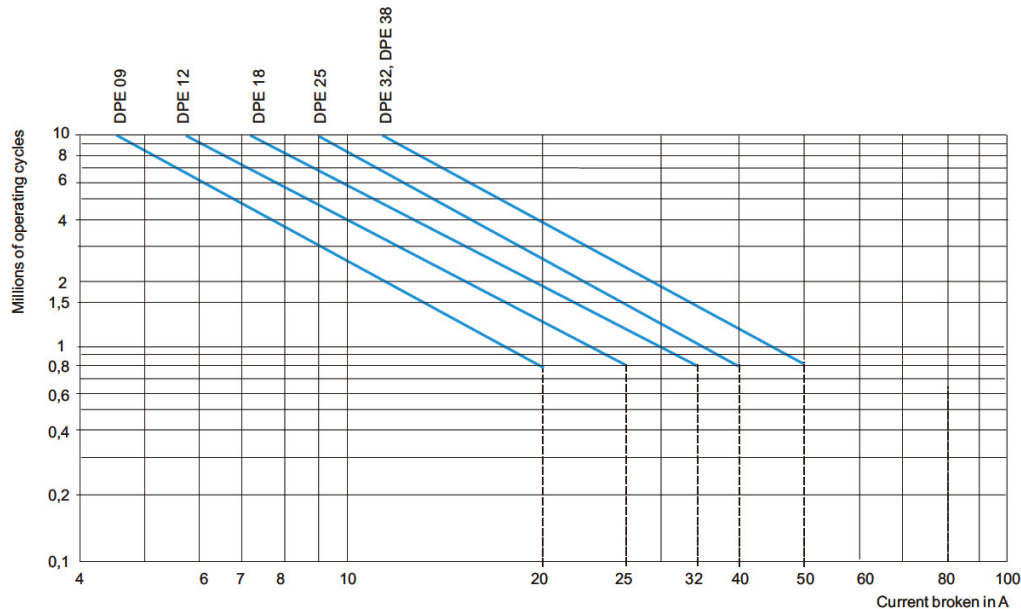
| Characteristics of Instantaneous Contacts                                                |                             |                                                                                        |
|------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------|
| Number of Contacts                                                                       |                             | 2                                                                                      |
| Rated Operational Voltage (U <sub>e</sub> )                                              |                             | 690V                                                                                   |
| Rated Insulation Voltage (U <sub>i</sub> )                                               | Conforming to IEC 60947-5-1 | 690V                                                                                   |
|                                                                                          | Conforming to UL, CSA       | 600V                                                                                   |
| Conventional Thermal Current (I <sub>th</sub> )<br>For Ambient Temperature ≤140°F [60°C] |                             | 10A                                                                                    |
| Frequency of the Operational Current                                                     |                             | 25 - 400 Hz                                                                            |
| Minimum Switching Capacity                                                               | U <sub>min</sub>            | 17V                                                                                    |
|                                                                                          | I <sub>min</sub>            | 5mA                                                                                    |
| Short-Circuit Protection<br>Conforming to IEC 60947-5-1 and VDE 0660                     |                             | gG fuse: 10A                                                                           |
| Rated Making Capacity<br>Conforming to IEC 60947-5-1, 1ms                                |                             | AC: 140A<br>DC: 250A                                                                   |
| Short-Time Rating                                                                        |                             | Permissible for 1s: 100A<br>Permissible for 500ms: 120A<br>Permissible for 100ms: 140A |
| Insulation Resistance                                                                    |                             | >10mΩ                                                                                  |
| Mechanical Durability                                                                    |                             | 30 million operating cycles                                                            |

# Schneider Electric Easy TeSys Contactors

## Auxiliary Contact Block



### Use in Category AC-1 ( $U_e \leq 440$ V)



Control of resistive circuits ( $\cos \varphi \geq 0.95$ ).

The current broken ( $I_c$ ) in category AC-1 is equal to the current ( $I_e$ ) normally drawn by the load.

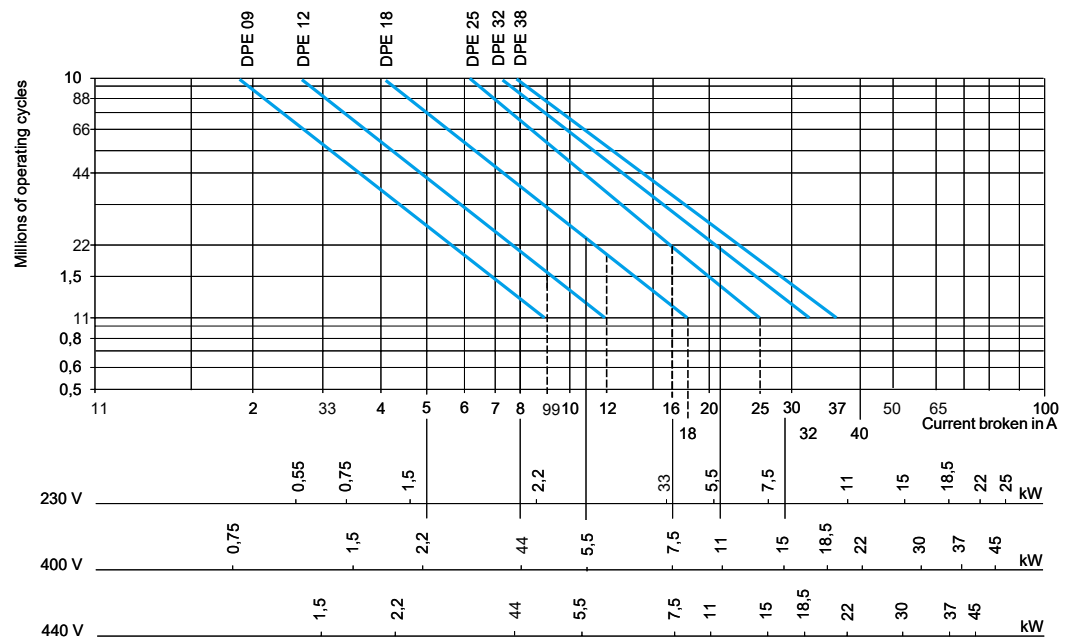
**Example:**

$U_e = 400$  V -  $I_e = 25$  A -  $\theta \leq 104^\circ$ F ( $40^\circ$ C) -  $I_c = 25$  A

1.5 million operating cycles required

The above selection curves show the contactor rating needed: DPE 25

### Use in Category AC-3 ( $U_e \leq 440$ V)



Control of 3-phase asynchronous squirrel cage motors with breaking while running. The current broken ( $I_c$ ) in category AC-3 is equal to the rated operational current of the motor.

**Example:**

Asynchronous motor with  $P = 5.5$  kW -  $U_e = 400$  V -  $I_e = 11$  A -  $I_c = I_e = 11$  A

or asynchronous motor with  $P = 5.5$  kW -  $U_e = 415$  V -  $I_e = 11$  A -  $I_c = I_e = 11$  A

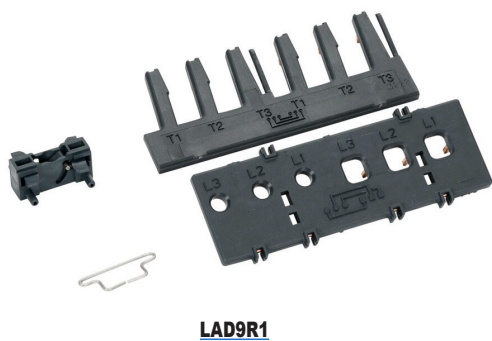
2 million operating cycles required

The above selection curves show the contactor rating needed: DPE 18

Schneider Electric Easy TeSys Contactors

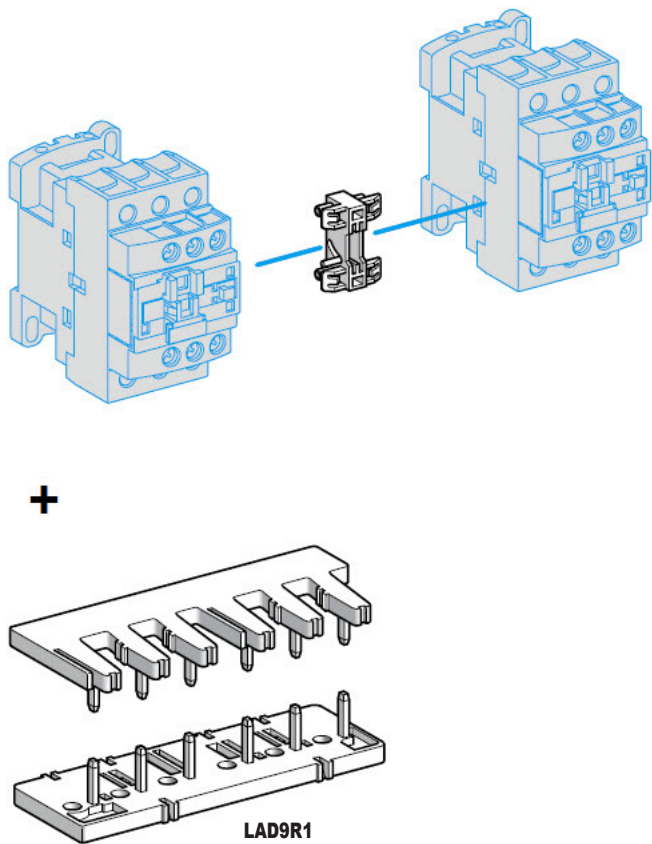
Accessories





| Easy TeSys Contactors Accessories Selection Guide<br>(For 3-Pole Reversing Contactors for Motor Control <sup>1)</sup> ) |         |                                                                                                      |                  |                     |
|-------------------------------------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------------------|------------------|---------------------|
| Part Number                                                                                                             | Price   | Description                                                                                          | Weight lb [kg]   | Drawing             |
| <a href="#">LAD9R1</a>                                                                                                  | \$44.50 | Kit includes 1 mechanical interlock without electrical interlocking plus 1 set of power connections. | 0.099 [0.045 kg] | <a href="#">PDF</a> |

(1) Horizontally mounted, assembled by the customer using 2 identical contactors.

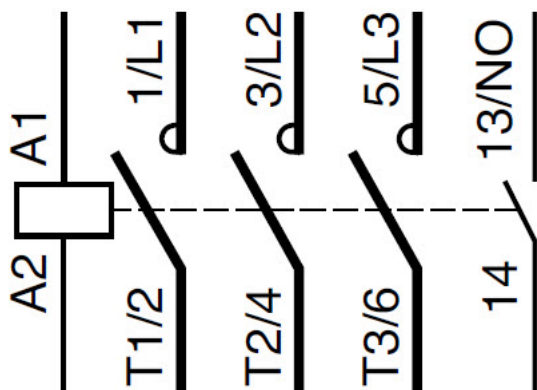


# Schneider Electric Easy TeSys Contactors



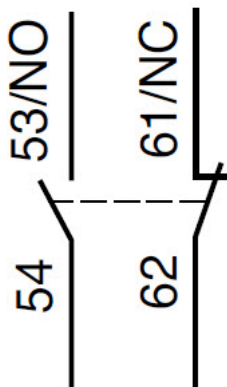
## Contact Configurations

3-Pole Contactors  
DPE09xx - DPE38xx



## Front Mounted Add-on Contact Blocks - Instantaneous Auxiliary Contacts

1 NO + 1 NC (DPEAN11)



# Schneider Electric Easy TeSys 3-Pole Thermal Overload Relays

**DP01**

Easy TeSys 3-pole thermal overload relays are designed for direct connection to Easy TeSys contactors. These thermal overload relays protect AC circuits and motors against overloads, phase failures, long starting times, and prolonged stalled rotor conditions.

The thermal relay permanently controls the current driven by the motor. When this current exceeds the setting, its auxiliary contacts will change state, causing the motor to stop.

These compensated overload relays, with manual or automatic reset, are designed for AC use with fuses or circuit breakers.

These overload relays feature a relay trip indicator.

## Features

- Adjustment dial  $I_r$
- Test button
- Operation of the Test button allows:
  - Checking of control circuit wiring
  - Simulation of relay tripping (actuates both the NO and NC contacts)
- Stop button. Actuates the NC contact; does not affect the NO contact
- Reset button
- Trip indicator
- Lockable settings dial cover
- Selector for manual or automatic reset

Easy TeSys overload relays are supplied with the selector in the manual position, protected by a cover.

Deliberate action is required to move it to the automatic position.

**DP16****DP32**

## Easy TeSys Thermal Overload Relays Selection Guide (Class 10<sup>1</sup> for Connection Using Screw Clamp Terminals)

| Part Number            | Price   | Relay Setting Range (A) | Fuses To Be Used |        | For Use With Contactor | Weight lb [kg]      | Drawing             |
|------------------------|---------|-------------------------|------------------|--------|------------------------|---------------------|---------------------|
|                        |         |                         | aM (A)           | gG (A) |                        |                     |                     |
| <a href="#">DPER01</a> | \$29.50 | 0.10 - 0.16             | 0.25             | 2      | DPE09xx - DPE32xx      | 0.287<br>[0.13]     | <a href="#">PDF</a> |
| <a href="#">DPER02</a> | \$29.50 | 0.16 - 0.25             | 0.5              | 2      |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER03</a> | \$29.50 | 0.25 - 0.40             | 1                | 2      |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER04</a> | \$29.50 | 0.40 - 0.63             | 1                | 2      |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER05</a> | \$29.50 | 0.63 - 1                | 2                | 4      |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER06</a> | \$29.50 | 1 - 1.6                 | 2                | 4      |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER07</a> | \$29.50 | 1.6 - 2.5               | 4                | 6      |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER08</a> | \$29.50 | 2.5 - 4                 | 6                | 10     |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER10</a> | \$29.50 | 4 - 6                   | 8                | 16     |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER12</a> | \$29.50 | 5.5 - 8                 | 12               | 20     |                        |                     | <a href="#">PDF</a> |
| <a href="#">DPER14</a> | \$29.50 | 7 - 10                  | 12               | 20     | DPE12xx - DPE32xx      | <a href="#">PDF</a> |                     |
| <a href="#">DPER16</a> | \$29.50 | 9 - 13                  | 16               | 25     |                        | <a href="#">PDF</a> |                     |
| <a href="#">DPER21</a> | \$29.50 | 12 - 18                 | 20               | 35     | DPE18xx - DPE32xx      | <a href="#">PDF</a> |                     |
| <a href="#">DPER22</a> | \$29.50 | 16 - 24                 | 25               | 50     | DPE25xx - DPE32xx      | <a href="#">PDF</a> |                     |
| <a href="#">DPER32</a> | \$45.00 | 23 - 32                 | 40               | 63     |                        | <a href="#">PDF</a> |                     |

(1) Standard UL 60947-4-1 specifies a tripping time for 7.2 times the setting current  $I_R$ : Class 10, between 4 and 10 seconds.

# Schneider Electric Easy TeSys

## 3-Pole Thermal Overload Relays



| Power Circuit Characteristics                          |                 |                 |
|--------------------------------------------------------|-----------------|-----------------|
| Relay Type                                             | DPER01 - DPER21 | DPER22 - DPER32 |
| Size                                                   | 1               |                 |
| Tripping Class (Conforming to IEC 60947-4-1)           | 10              |                 |
| Rated Insulation Voltage (Conforming to IEC 60947-4-1) | 690V            |                 |
| Rated impulse withstand voltage ( $U_{imp}$ )          | 6kV             |                 |
| Frequency Limits of Operating Current                  | 50-60 Hz        |                 |
| Setting Range                                          | 0.1 - 18 A      | 16 - 38 A       |

| Power Circuit Connections<br>(Connection by Screw Clamp Terminals) |                                        |                                        |
|--------------------------------------------------------------------|----------------------------------------|----------------------------------------|
| Relay Type                                                         | DPER01 - DPER21                        | DPER22 - DPER32                        |
|                                                                    | Minimum/Maximum C.S.A.                 |                                        |
| Flexible cable without cable end - 1 conductor                     | 1.5 - 6 mm <sup>2</sup><br>AWG 16 - 10 | 2.5 - 10 mm <sup>2</sup><br>AWG 14 - 8 |
| Flexible cable with cable end - 1 conductor                        | 1 - 4 mm <sup>2</sup><br>AWG 18 - 10   | 1.5 - 6 mm <sup>2</sup><br>AWG 16 - 10 |
| Solid cable without cable end - 1 conductor                        | 1 - 6 mm <sup>2</sup><br>AWG 18 - 10   | 2.5 - 10 mm <sup>2</sup><br>AWG 14 - 8 |
| Tightening torque                                                  | 15.05 in•lb [1.7 N•m]                  | 22.13 in•lb (25 N•m)                   |

| Auxiliary Contact Characteristics                                                 |                                                                     |                            |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------|----------------------------|
| Relay Type                                                                        | DPER01 - DPER32                                                     |                            |
| Conforming to Standard                                                            | IEC 60947-4-1, IEC 60947-5-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1 |                            |
| Product Certifications                                                            | cUL, UL Listed                                                      |                            |
| Degree of Protection (Conforming to IEC 60529)                                    | IP2X                                                                |                            |
| Protective Treatment                                                              | IEC 60068                                                           |                            |
| Ambient Air Temperature                                                           | Storage                                                             | -76 to 176°F [-60 to 80°C] |
|                                                                                   | Normal operation without derating (IEC 60947-4-1)                   | -4 to 140°F [-20 to 60°C]  |
|                                                                                   | Minimum/maximum operating temperature (with derating)               | -4 to 158°F [-20 to 70°C]  |
| Operating Positions Without Derating (Relative to Normal Vertical Mounting Plane) | Any position                                                        |                            |
| Flame Resistance                                                                  | 1562°F [850°C]                                                      |                            |
| Shock Resistance                                                                  | 6gn - 11ms                                                          |                            |
| Vibration Resistance                                                              | 3gn                                                                 |                            |
| Dielectric Strength at 50Hz (Conforming to IEC 60255-5)                           | 6kV                                                                 |                            |
| Surge Withstand (Conforming to IEC 60801-5)                                       | 6kV                                                                 |                            |

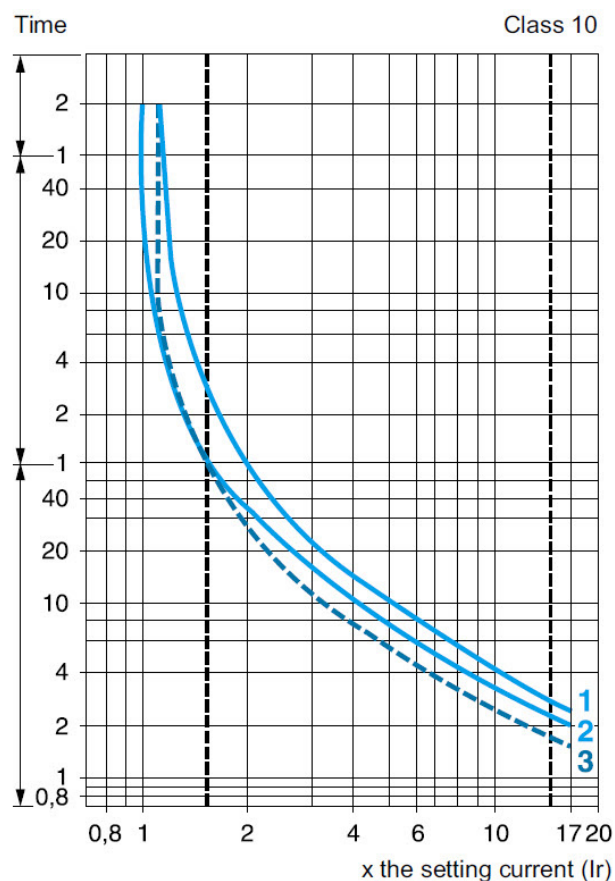
| Operating Characteristics                                  |                                                                         |  |
|------------------------------------------------------------|-------------------------------------------------------------------------|--|
| Relay Type                                                 | DPER01 - DPER32                                                         |  |
| Temperature Compensation                                   | -4 to 140°F [-20 to 60°C]                                               |  |
| Tripping Threshold (Conforming to IEC 60947-4-1)           | 1.14 ± 0.06 I <sub>r</sub>                                              |  |
| Sensitivity to Phase Failure (Conforming to IEC 60947-4-1) | Tripping current 130% of I <sub>r</sub> on two-phase, the last one at 0 |  |
| Surge Withstand (Conforming to IEC 60801-5)                | 6kV                                                                     |  |

# Schneider Electric Easy TeSys 3-Pole Thermal Overload Relays



## Tripping Curves

Average Operating Time Related to Multiples of the Setting Current



- 1 Balanced operation, 3-phase, without prior current flow (cold state)
- 2 2-phase operation, without prior current flow (cold state)
- 3 Balanced operation, 3-phase, after a long period at the set current (hot state)

# Schneider Electric Easy TeSys 3-Pole Thermal Overload Relays Panel Mount Accessory



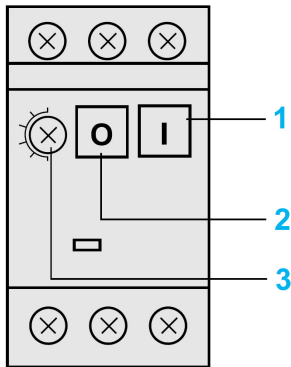
**LAD7B106**

| Easy TeSys Thermal Overload Relays Accessory Selection Guide |         |                                   |                             |                  |                  |                            |
|--------------------------------------------------------------|---------|-----------------------------------|-----------------------------|------------------|------------------|----------------------------|
| Part Number                                                  | Price   | Description                       | For Use With Overload Relay | Package Quantity | Weight lb [kg]   | Drawing                    |
| <a href="#"><u>LAD7B106</u></a>                              | \$12.00 | 35mm DIN rail/panel mount adapter | DPER01 - DPER32             | 1                | 0.22 lb [0.1 kg] | <a href="#"><u>PDF</u></a> |

# Schneider Electric Easy TeSys Manual Motor Controllers



**GP2E01**



The Easy TeSys line-up of motor controllers includes 3-pole thermal-magnetic circuit breakers conforming to IEC 60947-2 and IEC 60947-4-1. These devices also conform to UL 60947-4-1 as manual motor controllers and are suitable for use as the motor disconnect. Easy TeSys manual motor controllers are designed to control and protect motors.

## Connection

These circuit breakers are designed for connection by screw clamp terminals. This technique ensures secure, permanent, and durable clamping that is resistant to harsh environments, vibration and impact and is even more effective when conductors without cable ends are used. Each connection can take two independent conductors.

## Push button control

Energization is controlled manually by operating the Start button "I" [1]. De-energization is controlled manually by operating the Stop button "O" [2] or automatically by the thermal-magnetic protection elements or by a voltage trip attachment.

## Protection of motors

Motor protection is provided by the thermal-magnetic protection elements incorporated into the motor circuit breaker. As per IEC 60947-4-1 the magnetic elements (short-circuit protection) have a non-adjustable tripping threshold, which is equal to about 13 times the maximum setting current of the thermal trips.

The thermal elements (overload protection) include automatic compensation for ambient temperature variations. The rated operational current of the motor is specified and displayed by means of a graduated knob [3]. All live parts are protected against direct finger contact.

Easy TeSys manual motor controllers are easily mounted on DIN rail or directly to the panel.

## Easy TeSys Manual Motor Controller Selection Guide

| Part Number            | Price    | Setting Range Of Thermal Trips | Weight lb [kg]      | Drawing             |
|------------------------|----------|--------------------------------|---------------------|---------------------|
| <a href="#">GP2E01</a> | \$69.00  | 0.10 - 0.16                    | 0.573<br>[0.260 kg] | <a href="#">PDF</a> |
| <a href="#">GP2E02</a> | \$69.00  | 0.16 - 0.25                    |                     | <a href="#">PDF</a> |
| <a href="#">GP2E03</a> | \$69.00  | 0.25 - 0.40                    |                     | <a href="#">PDF</a> |
| <a href="#">GP2E04</a> | \$69.00  | 0.40 - 0.63                    |                     | <a href="#">PDF</a> |
| <a href="#">GP2E05</a> | \$69.00  | 0.63 - 1                       |                     | <a href="#">PDF</a> |
| <a href="#">GP2E06</a> | \$69.00  | 1 - 1.6                        |                     | <a href="#">PDF</a> |
| <a href="#">GP2E07</a> | \$69.00  | 1.6 - 2.5                      |                     | <a href="#">PDF</a> |
| <a href="#">GP2E08</a> | \$69.00  | 2.5 - 4                        |                     | <a href="#">PDF</a> |
| <a href="#">GP2E10</a> | \$69.00  | 4 - 6.3                        |                     | <a href="#">PDF</a> |
| <a href="#">GP2E14</a> | \$74.00  | 6 - 10                         |                     | <a href="#">PDF</a> |
| <a href="#">GP2E16</a> | \$74.00  | 9 - 14                         |                     | <a href="#">PDF</a> |
| <a href="#">GP2E20</a> | \$74.00  | 13 - 18                        |                     | <a href="#">PDF</a> |
| <a href="#">GP2E21</a> | \$74.00  | 17 - 23                        |                     | <a href="#">PDF</a> |
| <a href="#">GP2E22</a> | \$88.00  | 20 - 25                        |                     | <a href="#">PDF</a> |
| <a href="#">GP2E32</a> | \$111.00 | 24 - 32                        |                     | <a href="#">PDF</a> |

# Schneider Electric Easy TeSys Manual Motor Controllers



| Easy TeSys Manual Motor Controller Power Ratings |                                                                           |      |      |      |      |                                |                                         |
|--------------------------------------------------|---------------------------------------------------------------------------|------|------|------|------|--------------------------------|-----------------------------------------|
| Part Number                                      | Standard Power Ratings of 3-Phase Motors (50/60 Hz) in Category AC-3 [kW] |      |      |      |      | Setting Range of Thermal Trips | Magnetic Tripping Current Id $\pm 20\%$ |
|                                                  | 230V                                                                      | 400V | 440V | 500V | 690V |                                |                                         |
| GP2E01                                           | –                                                                         | –    | –    | –    | –    | 0.10 - 0.16                    | 1.5                                     |
| GP2E02                                           | –                                                                         | –    | –    | –    | –    | 0.16 - 0.25                    | 2.4                                     |
| GP2E03                                           | –                                                                         | –    | –    | –    | –    | 0.25 - 0.40                    | 5                                       |
| GP2E04                                           | –                                                                         | –    | –    | –    | 0.37 | 0.40 - 0.63                    | 8                                       |
| GP2E05                                           | –                                                                         | –    | –    | 0.37 | 0.55 | 0.63 - 1                       | 13                                      |
| GP2E06                                           | –                                                                         | 0.37 | 0.55 | 0.75 | 1.1  | 1 - 1.6                        | 22.5                                    |
| GP2E07                                           | 0.37                                                                      | 0.75 | 1.1  | 1.1  | 1.5  | 1.6 - 2.5                      | 33.5                                    |
| GP2E08                                           | 0.75                                                                      | 1.5  | 1.5  | 2.2  | 3    | 2.5 - 4                        | 51                                      |
| GP2E10                                           | 1.1                                                                       | 2.2  | 3    | 3.7  | 4    | 4 - 6.3                        | 78                                      |
| GP2E14                                           | 2.2                                                                       | 4    | 4    | 5.5  | 7.5  | 6 - 10                         | 138                                     |
| GP2E16                                           | –                                                                         | 5.5  | 5.5  | 9    | 11   | 9 - 14                         | 170                                     |
| GP2E20                                           | 4                                                                         | 7.5  | 9    | 10   | 15   | 13 - 18                        | 223                                     |
| GP2E21                                           | 5.5                                                                       | 9    | 11   | 11   | 18.5 | 17 - 23                        | 327                                     |
| GP2E22                                           | 5.5                                                                       | 11   | 11   | 15   | 22   | 20 - 25                        | 327                                     |
| GP2E32                                           | 7.5                                                                       | 15   | 15   | 18.5 | 22   | 24 - 32                        | 416                                     |

| Easy TeSys Manual Motor Controllers From 3/4 to 20HP / 460V (Screw Terminals) |                     |                            |      |      |         |      |      |           |                                 |
|-------------------------------------------------------------------------------|---------------------|----------------------------|------|------|---------|------|------|-----------|---------------------------------|
| Part Number                                                                   | Thermal Setting (A) | Maximum Horsepower Ratings |      |      |         |      |      |           | Group Motor Applications        |
|                                                                               |                     | Single-Phase               |      |      | 3-Phase |      |      |           | Max Fuse or Circuit Breaker (A) |
|                                                                               |                     | 120V                       | 200V | 230V | 115V    | 200V | 230V | 460V 575V |                                 |
| GP2E01                                                                        | 0.10 - 0.16         | –                          | –    | –    | –       | –    | –    | –         | 450                             |
| GP2E02                                                                        | 0.16 - 0.25         | –                          | –    | –    | –       | –    | –    | –         |                                 |
| GP2E03                                                                        | 0.25 - 0.40         | –                          | –    | –    | –       | –    | –    | –         |                                 |
| GP2E04                                                                        | 0.40 - 0.63         | –                          | –    | –    | –       | –    | –    | –         |                                 |
| GP2E05                                                                        | 0.63 - 1            | –                          | –    | –    | –       | –    | –    | 1/2       |                                 |
| GP2E06                                                                        | 1 - 1.6             | –                          | –    | 1/10 | –       | –    | –    | 3/4 3/4   |                                 |
| GP2E07                                                                        | 1.6 - 2.5           | –                          | 1/6  | 1/6  | –       | 1/2  | 1/2  | 1 1.5     |                                 |
| GP2E08                                                                        | 2.5 - 4             | 1/8                        | 1/4  | 1/3  | –       | 3/4  | 3/4  | 2 3       |                                 |
| GP2E10                                                                        | 4 - 6.3             | 1/4                        | 1/2  | 1/2  | 3/4     | 1    | 1.5  | 3 5       |                                 |
| GP2E14                                                                        | 6 - 10              | 1/2                        | 1    | 1.5  | 1       | 2    | 3    | 5 7.5     |                                 |
| GP2E16                                                                        | 9 - 14              | 3/4                        | 2    | 2    | 2       | 3    | 3    | 10 10     |                                 |
| GP2E20                                                                        | 13 - 18             | 1                          | 2    | 3    | 2       | 5    | 5    | 10 15     |                                 |
| GP2E21                                                                        | 17 - 23             | 1.5                        | 3    | 3    | 3       | 5    | 7.5  | 15 20     |                                 |
| GP2E22                                                                        | 20 - 25             | 2                          | –    | –    | –       | 7.5  | 7.5  | 15 20     |                                 |
| GP2E32                                                                        | 24 - 32             | 2                          | 5    | 5    | 5       | 7.5  | 10   | 20 25     |                                 |

| Easy TeSys Manual Motor Controller North American Short Circuit and Motor Group Ratings |                |                                        |       |       |
|-----------------------------------------------------------------------------------------|----------------|----------------------------------------|-------|-------|
| Part Number                                                                             | Overload Range | Maximum RMS Short-Circuit Current [kA] |       |       |
|                                                                                         |                | 240V*                                  | 480V* | 600V* |
| GP2E01                                                                                  | 0.10 - 0.16    | 35                                     | 35    | 18    |
| GP2E02                                                                                  | 0.16 - 0.25    | 35                                     | 35    | 18    |
| GP2E03                                                                                  | 0.25 - 0.40    | 35                                     | 35    | 18    |
| GP2E04                                                                                  | 0.40 - 0.63    | 35                                     | 35    | 18    |
| GP2E05                                                                                  | 0.63 - 1       | 35                                     | 35    | 18    |
| GP2E06                                                                                  | 1 - 1.6        | 35                                     | 35    | 18    |
| GP2E07                                                                                  | 1.6 - 2.5      | 35                                     | 35    | 18    |
| GP2E08                                                                                  | 2.5 - 4        | 35                                     | 35    | 18    |
| GP2E10                                                                                  | 4 - 6.3        | 35                                     | 35    | 18    |
| GP2E14                                                                                  | 6 - 10         | 30                                     | 30    | 18    |
| GP2E16                                                                                  | 9 - 14         | 25                                     | 25    | 10    |
| GP2E20                                                                                  | 13 - 18        | 25                                     | 25    | 10    |
| GP2E21                                                                                  | 17 - 23        | 25                                     | 10    | 10    |
| GP2E22                                                                                  | 20 - 25        | 25                                     | 10    | 10    |
| GP2E32                                                                                  | 24 - 32        | 25                                     | 10    | 10    |

\* Nominal System Voltage

Easy TeSys contactors may be used on the load side of Easy TeSys Manual Motor Controllers in group installations on a circuit with an available short-circuit current no greater than shown in the table below when protected by fuses or circuit breakers:

| Easy TeSys Manual Motor Controller Use on the Load Side |                                        |        |
|---------------------------------------------------------|----------------------------------------|--------|
| Part Number                                             | Maximum RMS Short-Circuit Current [kA] |        |
|                                                         | 480VAC                                 | 600VAC |
| GP2E01                                                  | 22                                     | 22     |
| GP2E02                                                  | 22                                     | 22     |
| GP2E03                                                  | 22                                     | 22     |
| GP2E04                                                  | 22                                     | 22     |
| GP2E05                                                  | 22                                     | 22     |
| GP2E06                                                  | 22                                     | 22     |
| GP2E07                                                  | 22                                     | 22     |
| GP2E08                                                  | 22                                     | 22     |
| GP2E10                                                  | 22                                     | 22     |
| GP2E14                                                  | 22                                     | 22     |
| GP2E16                                                  | 22                                     | 10     |
| GP2E20                                                  | 22                                     | 10     |
| GP2E21                                                  | 10                                     | 10     |
| GP2E22                                                  | 10                                     | 10     |

The above Group Installations may be used with Schneider's GV2Gx45 busbar and/or GV1G09 terminal block adapter.

# Schneider Electric Easy TeSys Manual Motor Controllers



| Easy TeSys Manual Motor Controller Environmental Characteristics          |                                  |                                                                   |
|---------------------------------------------------------------------------|----------------------------------|-------------------------------------------------------------------|
| Circuit Breaker Type                                                      |                                  | GP2Exx                                                            |
| Conforming to Standards                                                   |                                  | IEC 60947-2, IEC 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1 |
| Product Certifications                                                    |                                  | cUL, UL Listed                                                    |
| Protective Treatment (Conforming to IEC 60068-2-30)                       |                                  | IEC60068-2-30 Test Db, Variant 2                                  |
| Degree of Protection                                                      |                                  | In GV2 MC01 enclosure: IP 41<br>In GV2 MC02 enclosure: IP 55      |
| Ambient Air Temperature                                                   | Storage                          | -40 to 176°F [-40 to 80°C]                                        |
|                                                                           | Operation                        | -4 to 140°F [-20 to 60°C]                                         |
| Flame Resistance (Conforming to IEC 80695-2-1)                            |                                  | 1760 [960°C]                                                      |
| Maximum Operating Altitude                                                |                                  | 6561.68 ft [2000m]                                                |
| Cabling<br>(Number of conductors and C.S.A.)                              | Solid cable                      | Min: 2x1 mm <sup>2</sup><br>Max: 2x6 mm <sup>2</sup>              |
|                                                                           | Flexible cable without cable end | Min: 2x1.5 mm <sup>2</sup><br>Max: 2x6 mm <sup>2</sup>            |
|                                                                           | Flexible cable with cable end    | Min: 2x1 mm <sup>2</sup><br>Max: 2x4 mm <sup>2</sup>              |
|                                                                           | AWG 75° C CU                     | 8 - 18                                                            |
| Suitable For Isolation (Conforming to IEC 60947-1 § 7-1-6)                |                                  | Yes                                                               |
| Tightening Torque                                                         |                                  | 15.05 lbf•in [1.7 N•m]                                            |
| Rated Operational Voltage ( $U_o$ ) (Conforming to IEC 60947-2)           |                                  | 690V                                                              |
| Rated Insulation Voltage ( $U_i$ ) (Conforming to IEC 60947-2)            |                                  | 690V                                                              |
| Rated Operational Frequency (Conforming to IEC 60947-2)                   |                                  | 50/60 Hz                                                          |
| Rated Impulse Withstand Voltage ( $U_{imp}$ ) (Conforming to IEC 60947-2) |                                  | 6kV                                                               |
| Total Power Dissipated Per Pole                                           |                                  | 2.5 W                                                             |
| Mechanical Durability                                                     |                                  | 100,000 C.O. [C.O.: closing, opening]                             |
| Electrical Durability for AC-3 Duty                                       |                                  | 100,000 C.O. [C.O.: closing, opening]                             |
| Duty Class (Maximum Operating Rate)                                       |                                  | 25 C.O. [C.O.: closing, opening] per hour                         |

| Easy TeSys Manual Motor Controller Breaking Capacity    |                         |                             |     |    |     |     |    |    |     |          |
|---------------------------------------------------------|-------------------------|-----------------------------|-----|----|-----|-----|----|----|-----|----------|
| Breaking Capacity Rating<br>(Conforming to IEC 60947-2) |                         | Circuit Breaker Type GP2Exx |     |    |     |     |    |    |     |          |
|                                                         |                         | 01 to 06                    | 07  | 08 | 10  | 14  | 16 | 20 | 21  | 22 to 32 |
| Rating (A)                                              |                         | 0.1 to 1.6                  | 2.5 | 4  | 6.3 | 10  | 14 | 18 | 23  | 25 to 32 |
| 230/240 V                                               | $I_{cu}$ [kA]           | *                           | *   | *  | *   | *   | *  | *  | 30  | 30       |
|                                                         | $I_{cs}\%$ <sup>1</sup> | *                           | *   | *  | *   | *   | *  | *  | 100 | 100      |
| 400/415 V                                               | $I_{cu}$ [kA]           | *                           | *   | *  | *   | *   | 10 | 10 | 10  | 10       |
|                                                         | $I_{cs}\%$ <sup>1</sup> | *                           | *   | *  | *   | *   | 50 | 50 | 50  | 50       |
| 440V                                                    | $I_{cu}$ [kA]           | *                           | *   | *  | 30  | 10  | 6  | 6  | 5   | 5        |
|                                                         | $I_{cs}\%$ <sup>1</sup> | *                           | *   | *  | 100 | 100 | 50 | 50 | 50  | 50       |
| 500V                                                    | $I_{cu}$ [kA]           | *                           | *   | *  | 30  | 8   | 5  | 5  | 3   | 3        |
|                                                         | $I_{cs}\%$ <sup>1</sup> | *                           | *   | *  | 100 | 100 | 75 | 75 | 75  | 75       |
| 690V                                                    | $I_{cu}$ [kA]           | *                           | 2   | 2  | 2   | 2   | 2  | 2  | 2   | 2        |
|                                                         | $I_{cs}\%$ <sup>1</sup> | *                           | 75  | 75 | 75  | 75  | 75 | 75 | 75  | 75       |

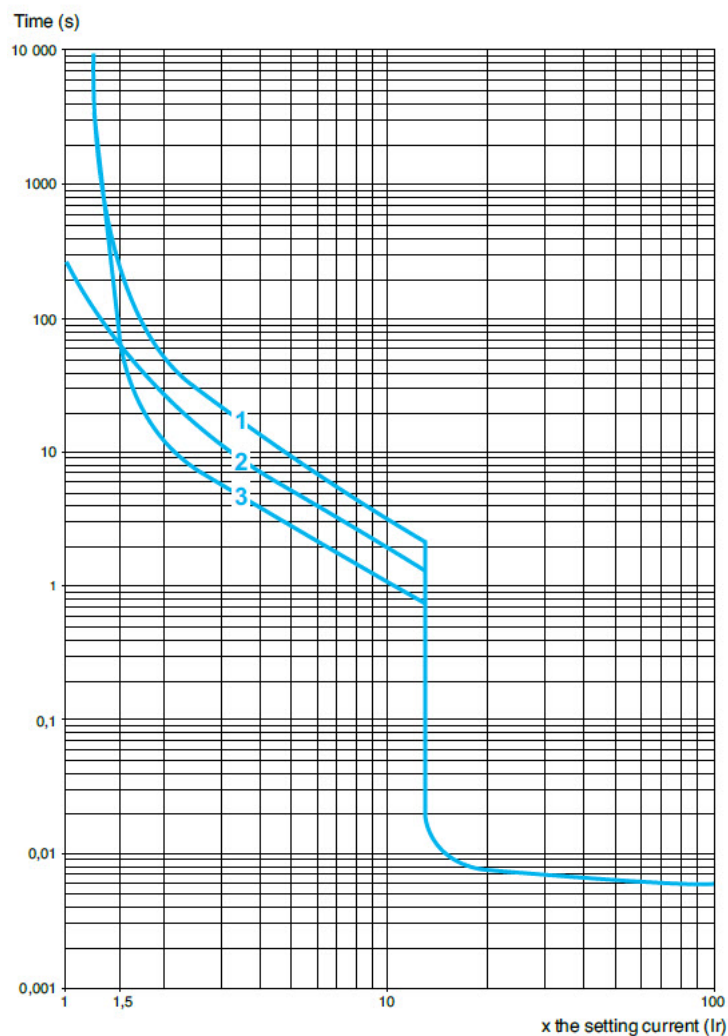
\* >100kA  
(1) As % of  $I_{cu}$

# Schneider Electric Easy TeSys Manual Motor Controllers



## Tripping Curves

Average Operating Times at 20°C Related to Multiples of the Setting Current



- 1 3 poles from cold state
- 2 2 poles from cold state
- 3 3 poles from hot state

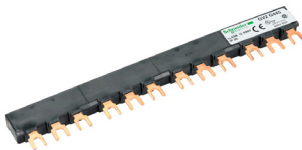
# Schneider Electric Easy TeSys Manual Motor Controllers

**GPEFC11**

| Easy TeSys Manual Motor Controller Contact Blocks Selection Guide |         |                                               |                |                  |                    |                     |
|-------------------------------------------------------------------|---------|-----------------------------------------------|----------------|------------------|--------------------|---------------------|
| Part Number                                                       | Price   | Description                                   | Maximum Number | Type of Contacts | Weight lb [kg]     | Drawing             |
| <a href="#">GPEFC11</a>                                           | \$13.00 | Instantaneous auxiliary contacts, front mount | 2              | NO + NC          | 0.11 lb [0.050 kg] | <a href="#">PDF</a> |

**GV2MC02**

| Easy TeSys Manual Motor Controller Enclosures Selection Guide |         |                                                                               |                      |                     |                     |
|---------------------------------------------------------------|---------|-------------------------------------------------------------------------------|----------------------|---------------------|---------------------|
| Part Number                                                   | Price   | Description                                                                   | Degree of Protection | Weight lb [kg]      | Drawing             |
| <a href="#">GV2MC01</a>                                       | \$64.00 | Enclosure, surface mounting, double insulated, with protective sealable cover | IP41                 | 0.639 lb [0.290 kg] | <a href="#">PDF</a> |
| <a href="#">GV2MC02</a>                                       | \$92.00 |                                                                               | IP55                 |                     | <a href="#">PDF</a> |

**GV2G445**

| Easy TeSys Manual Motor Controller Busbar Accessories Selection Guide |         |                   |                    |                |                     |
|-----------------------------------------------------------------------|---------|-------------------|--------------------|----------------|---------------------|
| Part Number                                                           | Price   | Description       | Number of Tap-offs | Pitch          | Drawing             |
| <a href="#">GV2G245</a>                                               | \$27.50 | 3-pole 63A busbar | 2                  | 1.77 in [45mm] | <a href="#">PDF</a> |
| <a href="#">GV2G345</a>                                               | \$34.00 |                   | 3                  |                | <a href="#">PDF</a> |
| <a href="#">GV2G445</a>                                               | \$40.50 |                   | 4                  |                | <a href="#">PDF</a> |

**GV1G09**

| Easy TeSys Manual Motor Controller Terminal Block Accessories Selection Guide |         |                                                               |                  |                     |
|-------------------------------------------------------------------------------|---------|---------------------------------------------------------------|------------------|---------------------|
| Part Number                                                                   | Price   | Description                                                   | Package Quantity | Drawing             |
| <a href="#">GV1G09</a>                                                        | \$40.50 | Terminal block, top feed incoming power                       | 1                | <a href="#">PDF</a> |
| <a href="#">GV2AF3</a>                                                        | \$4.00  | Combination block (between GP2E and contactor DPE09 to DPE38) | 10               | <a href="#">PDF</a> |