SCHMERSAL 30mm IP65 Emergency Stop Pushbuttons

EDRR40.VHRT

EDRZ40.VHRT

30mm IP65 Emergency Stop Pushbuttons*		
Part Number	***EDRR40.VHRT***	***EDRZ40.VHRT***
Price	$4zec:	$4zeb:
Front ring color	Gold	Gold
Drawing Link	PDF	PDF
Description	Schmersal emergency stop pushbutton, IP65, 30mm, twist-to-release, operator only, plastic base, metal bezel, Operator: red, mushroom, 40mm, round, metal. Requires contact blocks and EFR spring element.	Schmersal emergency stop pushbutton, IP65, 30mm, push-lock pull-reset, operator only, plastic base, metal bezel, Operator: red, mushroom, 40mm, round, metal. Requires contact blocks.
Mounting diameter	30.5 mm [1.20 in]	
Actuating stroke	4 to 5 mm	
Dome material	Anodized aluminum	
Front ring material	Anodized aluminum	
Front panel thickness	1 to 6 mm	
Weight	91g [3.20 oz]	
Mounting screws tightening torque	0.6 N·m [0.44 lb·ft]	
Ambient temperature	-25 to +75°C [-13 to +167°F]	
Shock resistance	> 20g / 10 to 200Hz	
Ingress protection rating	IP65	
Mechanical life	100,000 operations	
Standards **	IEC 60947-5-1; IEC 60947-1; UL File E57648	

***Operator only. Purchase contact blocks separately.**
**** To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.**

Spring Element		
Part Number	***Price***	***Description***
EFR	$4zsn:	Schmersal spring element, for use with Schmersal EDRR40 series emergency stop pushbuttons.

EFR

Legend Plate			
Part Number	***Price***	***Drawing Link***	***Description***
DPF-9	$-4zsl:	PDF	Schmersal legend plate, metal, round, yellow field, yellow background, legend plate marking "blank". For use with 30mm pilot devices.

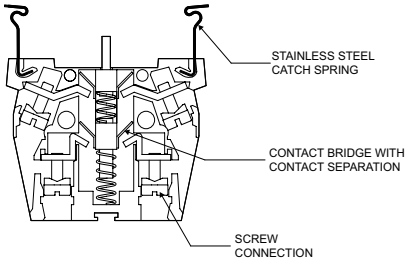
DPF-9

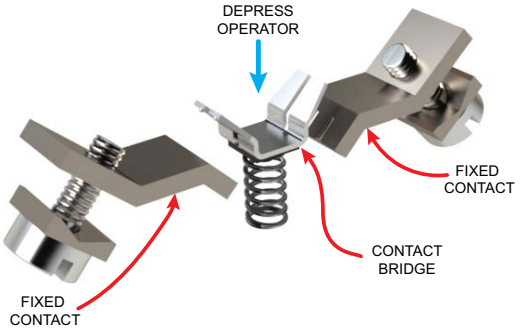
SCHMERSAL

Contact Blocks and Light Terminal Blocks Overview

Features

- A self-cleaning contact bridge system, known as Elan four-way system, which is particularly suitable for low voltage applications and has a lower switching capacity of 5VDC/3.2 mA (max. 400VAC/8A). It is designed in the form of a bent twin contact bridge, with parallel and also diagonal operation.
- Block mounting via snap-on stainless steel springs.
- Complete terminal designations visible at a glance in compliance with IEC 60 947-1 (VDE 0660, Part 100) with a complete function and sequence number (refer also to product ranges). The function number identifies the N.C. and N.O. contact. The sequence number specifies the number and the order of the contacts on the complete switching device.
- N.C. contacts with positive opening in compliance with IEC 60 947-5-1 (VDE 0660 Part 200).
- Galvanically isolated contact circuits in 2-pole blocks.
- High resistance to shock and vibrations.





Technical Specifications

	Contact Blocks	Light Blocks (ELE)	Light Blocks (ELDE)
General description	Contact element	Light terminal block w/Ba9S base	Light terminal block w/LED
Enclosure material	Plastic, glass fiber reinforced	Plastic, glass fiber reinforced	Plastic, glass fiber reinforced
Contact material	Fine-silver, phosphor bronze or brass carrier	–	–
Utilization category	AC-15: 250 V / 8 A DC-13: 24 V / 5 A	–	–
Suitability for low voltages	≥ 5VDC / 3.2 mA	–	–
Rated insulation voltage Ui	400V	440V	440V
Rated impulse withstand voltage U_{imp}	4kV	–	–
Thermal test current Ithe	10A	–	–
Max. fuse rating	10A gG D-fuse slow blow	10A gG T-slow blow	10A gG T-slow blow
Wire size	0.5 mm² to 2.5 mm² (20 - 14 AWG)		
Tightening torque wire connection	Maximum 1 N·m (0.74 lb·ft)		
NEMA contact rating	A300 / P300	–	–
Switching frequency	1200 s/h	–	–
Switching capacity	5VDC / 3.2 mA (max 400VAC / 8A)	–	–
Mechanical life	10,000,000 operation	–	–
Resistance to shock	110 g/4ms to 30 g/18ms no bouncing	–	–
Resistance to vibration	> 20 g/10ms to 200Hz	–	–
Ambient temperature	-25 to +80°C [-13 to +176°F]		
Ingress protection rating	IP20 terminals / IP40 switching compartment	IP20 terminals	IP20 terminals
Standards	IEC 60947-5-1; IEC 60947-1; UL File E57648		

NEMA Contact Rating Designation

	Thermal Current	Voltage	Volt amperes
A300	10	300 AC	N/A
P300	5	300 DC	138

SCHMERSAL Contact Blocks

EF03.2

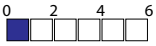
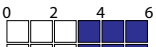
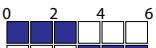
EF10.1

EF103.2

EF220.2

EF303.2

Contact Blocks

Part Number	Price	Qty.	Drawing Link	Contacts	Mounting Position	Travel Diagram (mm)	Wiring Diagram	Application
EF10.1*	$;11t?:	1	PDF	1 N.C.	1			Standard
EF10.2*	$11u5:	1	PDF		2			
EF10.3*	$11uc:	1	PDF		3			
EF03.1	$;11t#:	1	PDF	1 N.O.	1			
EF03.2	$11u3:	1	PDF		2			
EF03.3	$11ua:	1	PDF		3			
EF110.1*	$11u0:	1	PDF	2 N.C.	1			
EF110.2*	$11u7:	1	PDF		2			
EF110.3*	$11ue:	1	PDF		3			
EF033.1	$;;11t!:	1	PDF	2 N.O.	1			
EF033.2	$11u4:	1	PDF		2			
EF033.3	$11ub:	1	PDF		3			
EF103.1*	$;;11t,:	1	PDF	1 N.C. / 1 N.O.	1			
EF103.2*	$11u6:	1	PDF		2			
EF103.3*	$11ud:	1	PDF		3			
EF220.1**	$11u1:	1	PDF	2 N.C.	1			Emergency Stop
EF220.2**	$11u8:	1	PDF		2			
EF220.3**	$;11uf:	1	PDF		3			
EF303.1**	$11u2:	1	PDF	1 N.C. / 1 N.O.	1			
EF303.2**	$11u9:	1	PDF		2			
EF303.3**	$11ug:	1	PDF		3			

Not suitable for Emergency Stop devices
**Not suitable for maintained selector switches NWS/NWT

Travel Diagram Legend
■ = contact closed
□ = contact open
Numbers indicate distance in mm

EFM

Mounting Flange

Part Number	Price	Description	Drawing Link
EFM	$;4zfz:	Schmersal mounting flange, replacement. For use with E and N series pushbuttons.	PDF

SCHMERSAL Modular Design Flexibility

Non-Illuminated Devices

NDT Series
Non-illuminated pushbuttons

NDP Series
Mushroom pushbuttons

NW Series
Selector Switches

NDRZ Series
Emergency Stop Pushbuttons

Accessories
(Purchase Separately)

Accessory
(Purchase Separately)

Mounting Flange
(Included)

Contact Blocks
(Purchase Separately)

Illuminated Devices

NDL Series
Illuminated Pushbuttons

NML Series
Indicator Lights

Accessories
(Purchase Separately)

Mounting Flange
(Included)

Contacts and Light Terminal Blocks
(Purchase Separately)