

# SCHMERSAL Illuminated 30mm IP65 Plastic Pushbuttons

[EDL.VBL](#)[EDL.VGB](#)[EDL.VGN](#)[EDL.VRT](#)[EDL.VWS](#)

Illuminated 30mm IP65 Plastic Pushbuttons*					
Part Number	<a href="#"><u>EDL.VBL</u></a>	<a href="#"><u>EDL.VGB</u></a>	<a href="#"><u>EDL.VGN</u></a>	<a href="#"><u>EDL.VRT</u></a>	<a href="#"><u>EDL.VWS</u></a>
Price	\$24.00	\$24.00	\$24.00	\$24.00	\$24.00
Color	Blue	Yellow	Green	Red	White
Drawing Link	PDF	PDF	PDF	PDF	PDF
Description	Momentary action illuminated IP65 pushbuttons with flush mount				
Mounting diameter	30.5 mm [1.20 in]				
Actuating stroke	4 to 5 mm				
Dome material	Glass				
Front ring material	Aluminum				
Front panel thickness	1 to 6 mm				
Weight	30g [1.06 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	< 50g				
Vibration resistance	5g				
Ingress protection rating	IP65				
Standards **	IEC 60947-5-1; IEC 60947-1; UL File E57648				

\*Operator only. Purchase contact and light blocks separately.

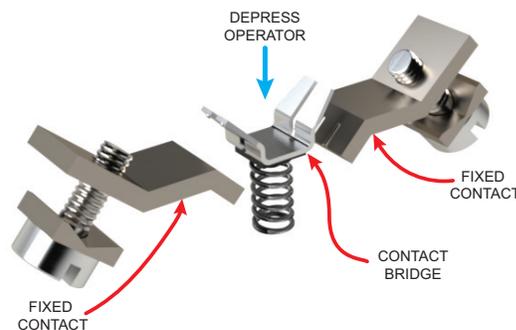
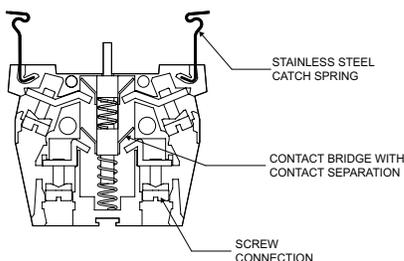
\*\*To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.



# 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)
<b>General description</b>	Contact element	Light terminal block w/Ba9S base	Light terminal block w/LED
<b>Enclosure material</b>	Plastic, glass fiber reinforced	Plastic, glass fiber reinforced	Plastic, glass fiber reinforced
<b>Contact material</b>	Fine-silver, phosphor bronze or brass carrier	-	-
<b>Utilization category</b>	AC-15: 250 V / 8 A DC-13: 24 V / 5 A	-	-
<b>Suitability for low voltages</b>	≥ 5VDC / 3.2 mA	-	-
<b>Rated insulation voltage <math>U_i</math></b>	400V	440V	440V
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>	4kV	-	-
<b>Thermal test current <math>I_{the}</math></b>	10A	-	-
<b>Max. fuse rating</b>	10A gG D-fuse slow blow	10A gG T-slow blow	10A gG T-slow blow
<b>Wire size</b>	0.5 mm <sup>2</sup> to 2.5 mm <sup>2</sup> (20 - 14 AWG)		
<b>Tightening torque wire connection</b>	Maximum 1 N·m (0.74 lb·ft)		
<b>NEMA contact rating</b>	A300 / P300	-	-
<b>Switching frequency</b>	1200 s/h	-	-
<b>Switching capacity</b>	5VDC / 3.2 mA (max 400VAC / 8A)	-	-
<b>Mechanical life</b>	10,000,000 operation	-	-
<b>Resistance to shock</b>	110 g/4ms to 30 g/18ms no bouncing	-	-
<b>Resistance to vibration</b>	> 20 g/10ms to 200Hz	-	-
<b>Ambient temperature</b>	-25 to +80°C [-13 to +176°F]		
<b>Ingress protection rating</b>	IP20 terminals / IP40 switching compartment	IP20 terminals	IP20 terminals
<b>Standards</b>	IEC 60947-5-1; IEC 60947-1; UL File E57648		

NEMA Contact Rating Designation			
	Thermal Current	Voltage	Volt amperes
<b>A300</b>	10	300 AC	N/A
<b>P300</b>	5	300 DC	138

# SCHMERSAL Contact Blocks



**EF03.2**



**EF10.1**



**EF103.2**



**EF220.2**



**EF303.2**



**EFM**

Contact Blocks								
Part Number	Price	Qty.	Drawing Link	Contacts	Mounting Position	Travel Diagram (mm)	Wiring Diagram	Application
<a href="#">EF10.1*</a>	\$9.25	1	<a href="#">PDF</a>	1 N.C.	1			Standard
<a href="#">EF10.2*</a>	\$9.25	1	<a href="#">PDF</a>		2			
<a href="#">EF10.3*</a>	\$9.25	1	<a href="#">PDF</a>		3			
<a href="#">EF03.1</a>	\$9.25	1	<a href="#">PDF</a>	1 N.O.	1			
<a href="#">EF03.2</a>	\$9.25	1	<a href="#">PDF</a>		2			
<a href="#">EF03.3</a>	\$9.25	1	<a href="#">PDF</a>		3			
<a href="#">EF110.1*</a>	\$14.00	1	<a href="#">PDF</a>	2 N.C.	1			
<a href="#">EF110.2*</a>	\$14.50	1	<a href="#">PDF</a>		2			
<a href="#">EF110.3*</a>	\$14.50	1	<a href="#">PDF</a>		3			
<a href="#">EF033.1</a>	\$14.50	1	<a href="#">PDF</a>	2 N.O.	1			
<a href="#">EF033.2</a>	\$14.50	1	<a href="#">PDF</a>		2			
<a href="#">EF033.3</a>	\$14.50	1	<a href="#">PDF</a>		3			
<a href="#">EF103.1*</a>	\$11.50	1	<a href="#">PDF</a>	1 N.C. / 1 N.O.	1			
<a href="#">EF103.2*</a>	\$11.50	1	<a href="#">PDF</a>		2			
<a href="#">EF103.3*</a>	\$11.50	1	<a href="#">PDF</a>		3			
<a href="#">EF220.1**</a>	\$14.50	1	<a href="#">PDF</a>	2 N.C.	1			
<a href="#">EF220.2**</a>	\$14.50	1	<a href="#">PDF</a>		2			
<a href="#">EF220.3**</a>	\$14.50	1	<a href="#">PDF</a>		3			
<a href="#">EF303.1**</a>	\$11.50	1	<a href="#">PDF</a>	1 N.C. / 1 N.O.	1			
<a href="#">EF303.2**</a>	\$11.50	1	<a href="#">PDF</a>		2			
<a href="#">EF303.3**</a>	\$11.50	1	<a href="#">PDF</a>		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

Mounting Flange			
Part Number	Price	Description	Drawing Link
<a href="#">EFM</a>	\$5.00	Schmersal mounting flange, replacement. For use with E and N series pushbuttons.	<a href="#">PDF</a>

# SCHMERSAL Light Terminal Blocks



**ELDE.Nxx230**



**ELDE.Nxx24**



**ELE**



**ELE230**

Light Terminal Blocks							
Part Number	Color	Price	Drawing Link	Voltage	Wattage	Diagram	Function
<a href="#">ELDE.NBL230</a>	Blue	\$45.50	<a href="#">PDF</a>	115-230 VAC	4		Integrated LED
<a href="#">ELDE.NBL24</a>		\$24.50	<a href="#">PDF</a>	24 VAC/VDC	0.4		
<a href="#">ELDE.NGB230</a>	Yellow	\$45.50	<a href="#">PDF</a>	115-230 VAC	4		
<a href="#">ELDE.NGB24</a>		\$24.50	<a href="#">PDF</a>	24 VAC/VDC	0.4		
<a href="#">ELDE.NGN230</a>	Green	\$45.50	<a href="#">PDF</a>	115-230 VAC	4		
<a href="#">ELDE.NGN24</a>		\$24.50	<a href="#">PDF</a>	24 VAC/VDC	0.4		
<a href="#">ELDE.NRT230</a>	Red	\$45.50	<a href="#">PDF</a>	115-230 VAC	4		
<a href="#">ELDE.NRT24</a>		\$24.50	<a href="#">PDF</a>	24 VAC/VDC	0.4		
<a href="#">ELDE.NWS230</a>	White	\$45.50	<a href="#">PDF</a>	115-230 VAC	4		
<a href="#">ELDE.NWS24</a>		\$24.50	<a href="#">PDF</a>	24 VAC/VDC	0.4		
<a href="#">ELE</a>	-	\$10.50	<a href="#">PDF</a>	24 VAC/VDC	1		Ba9S Lamp holder
<a href="#">ELE230</a>	-	\$28.00	<a href="#">PDF</a>	115-230 VAC	1		

Ba9S Bulbs for ELE and ELE230 Light Terminal Blocks							
Part Number	Color	Price	Qty	Lamp Voltage	Current Consumption	Power Consumption	Lamp Durability
<a href="#">APX510-24R</a>	Red	\$15.50	2	24V AC/DC	12mA AC 11mA DC	0.8 W	30,000h
<a href="#">APX510-24G</a>	Green	\$15.50					
<a href="#">APX510-24Y</a>	Yellow	\$15.50					
<a href="#">APX510-24S</a>	Blue	\$58.00					
<a href="#">APX510-24O</a>	Orange	\$15.50					



**APX510-24R**

Replacement LED Lamps for ELE and ELE230 Light Terminal Blocks							
Part Number	Color	Price	Qty	Lamp Voltage	Current Consumption	Power Consumption	Lamp Durability
<a href="#">ECX1911-2</a>	Red	\$17.50	2	24V AC/DC	14mA	0.6 W	100,000h
<a href="#">ECX1912-2</a>	Green	\$22.00			13mA		
<a href="#">ECX1913-2</a>	Yellow	\$17.50			13.3 mA		
<a href="#">ECX1914-2</a>	Blue	\$23.50			13mA		
<a href="#">ECX1915-2</a>	White	\$28.00			19mA		



**ECX1915-2**

NOTE: ELE230 has transformer to step down to 24V

Mounting Flange			
Part Number	Price	Description	Drawing Link
<a href="#">ELM</a>	\$5.00	Schmersal mounting flange, replacement. For use with E and N series illuminated pushbuttons.	<a href="#">PDF</a>



**ELM**

# SCHMERSAL Modular Design Flexibility

