Switch-disconnector, DC current, 60A

Part no. P-SOL60
Article no. 120936
Catalog No. P-SOL60

Powering Business Worldwide

Delivery programme

Product range			Switchgear for photovoltaic systems
Subrange			DC switch-disconnectors
Rated operational voltage	U_e	V	1000
Protection class			2
Number of conductors			2 pole
Max. rated operational current	I_e	A	63
Design			open

Technical data

Rated operational current 240 V	I_e	A	63
Pole			2 pole
Rated operational voltage	U_e	V	1000
Isolating characteristics			yes
Standards			IEC/EN 60 947-3 UL-508, TÜV-certified
Lifespan, mechanical	Operations		30000
Electrical		Operations	30000
Max. operating frequency		Ops/h	120
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature

Open		°C	-25 - +60
Mounting position			As required

Dimensions

Width		mm	55
Height		mm	140
Depth		mm	160

Top-hat rail			35 mm
Screw mounting			2 x M4 x 18 30 x 130
Weight		kg	1.25

Terminal capacities

Flexible with ferrule		mm^2	1 x (1 - 35) 2 x (1 - 35)
Solid or stranded		AWG	14 - 2
Rated short-time withstand current (t=1s)	I_{cw}	kA	0.72
up to 440 V 50/60 Hz	I_{cm}	kA	0.6
Internal resistance		mΩ	3

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	63
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	11.9
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60

IEC/EN 61439 design verification		
10.2 Strength of materials and parts		
10.2.2 Corrosion resistance		Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures		Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat		Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects		Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation		Meets the product standard's requirements.
10.2.5 Lifting		Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact		Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions		Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES		Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances		Meets the product standard's requirements.
10.5 Protection against electric shock		Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components		Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9 Insulation properties		
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage		Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material		Is the panel builder's responsibility.
10.10 Temperature rise		The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility		Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function		The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

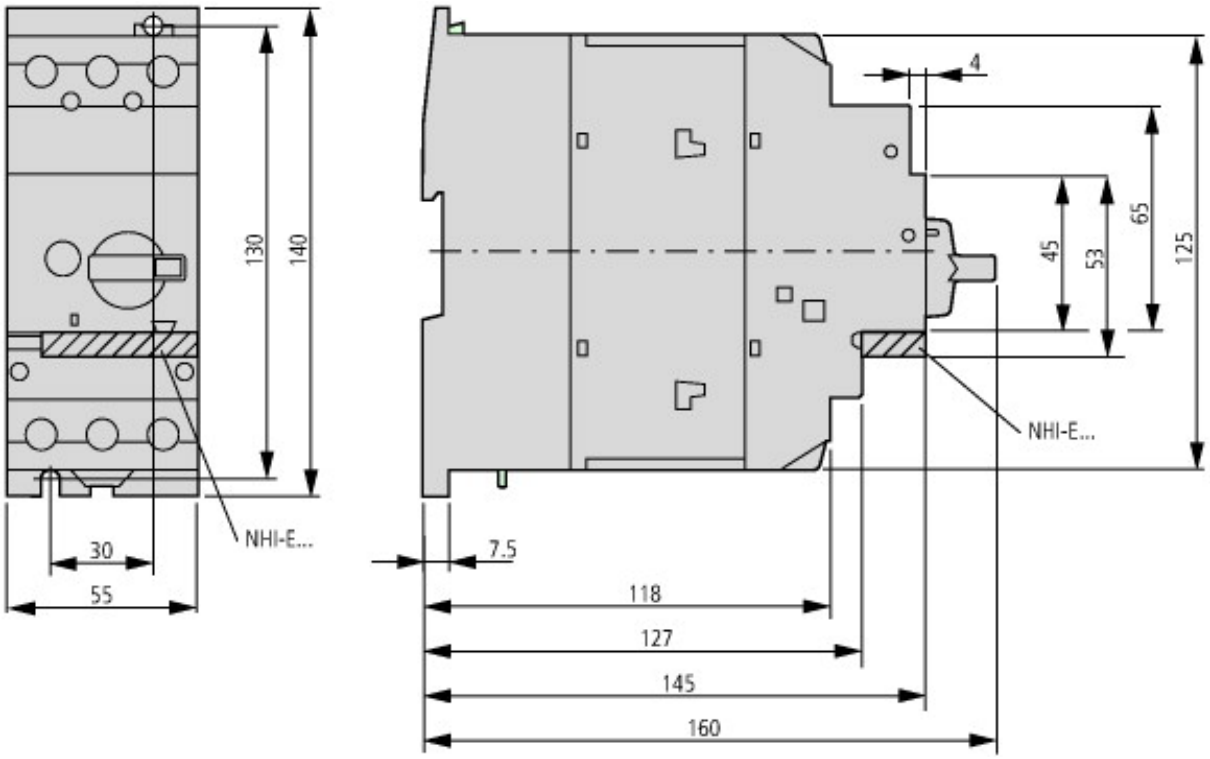
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])		
Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	0
Rated operating voltage	V	1000 - 1000
Rated permanent current Iu	A	63
Rated permanent current at AC-21, 400 V	A	0
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current Icw	kA	0.72
Rated operation power at AC-23, 400 V	kW	0
Switching power at 400 V	kW	63
Conditioned rated short-circuit current Iq	kA	0
Number of poles		2
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		Yes
Device construction		Built-in device fixed built-in technique
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No

Suitable for front mounting center	No
Suitable for distribution board installation	Yes
Suitable for intermediate mounting	No
Colour control element	Black
Type of control element	Turn button
Interlockable	No
Type of electrical connection of main circuit	Frame clamp
Degree of protection (IP), front side	IP20

Approvals

North America Certification	Request filed for UL and CSA
Specially designed for North America	No

Dimensions



Additional product information (links)

Motor starters and "Special Purpose Ratings" for the North American market	http://www.moeller.net/binary/ver_techpapers/ver953en.pdf
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf