

ISOLATOR SWITCH HS18

Data Sheet V1.0



The HS18 isolator switches meets the demand of loading and isolating the circuit. It is used as a main switch in low voltage distribution systems. It is a save solution for disconnecting the circuit from the power supply, so that the circuit can be maintained without interrupting power to the rest of the system. It is easily to be assembled and comes in 2 pole and 4 pole in a limited space of 18mm (1 module) and 36mm (3 module), but with a nominal current up to 40 ampere.

HS18 isolator switch



HS18 is a isolator switch compliant to product standard IEC/EN 60947 and with the following main technical features

- Isolator switch (IEC/EN 60947-3)
- 2 and 4 pole
- 25A and 40A version
- AC-21A/B | AC22-A/B

Application benefits

- Supply possible from top and bottom
- cable connection up to 10mm² cables.
- Toggle can be sealable in ON-OFF positions true a position inside attribute
- Family feeling in the SEP Compact range modular components.

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Technical Data



			HS18 – 2p	HS18 – 4p
Electrical features	Type		IEC/EN 60947-3	
	Standards		CE, UKCA, CB, KEMA KEUR	
	Certification		CN	
	Country of origin		Compliant, No Exemption	
	RoHS Compliance Status			
	Number of poles		2	4
	Number of modules (18mm)		2	4
	Rated operational current	Ie A	25, 40	
	Rated AC voltage	Ue V AC	415V	
	Rated frequency	Hz	50 - 60	
	Insulation voltage	Ui V	500	
	Rated impulse withstand voltage	Uimp kV	4	
	Dielectric test voltage at ind. freq. for 1 min.	kV	2.5	
	Rated short-circuit making capacity	Icm kA	480	
	Rated short-circuit withstand (1s)	Icw kA	480	
	Suitable for isolation		Yes	
	Overvoltage category		II	
Mechanical features	Pollution degree		2	
	Utilization category		AC-22A/B	
	Housing		Insulation group I - II, RAL 7035	
	Toggle		Insulation group II, RAL 5017	
	Contact position indication		Green / Red window	
	Electrical life	operations	≥ 1500	
	Mechanical life	operations	≥ 8500	
	Protection degree acc. to EN 60529	housing	IP4X	
		terminals	IP2X	
	Shock resistance acc. to IEC/EN 60068-2-27		40g - 18 shocks - 5ms	
	Vibration resistance acc. to IEC/EN 60068-2-6		0.35 mm or 5 g - 20 cycles at 5...150...5 Hz	
	Environmental conditions (damp heat) acc. to IEC/EN 60068-2-30	°C/RH	28 cycles with 55°C/90-96% and 25°C/95-100%	
	Ambient temperature (with daily average ≤ +35 °C)	°C	-25... +65	
	Storage temperature	°C	-40... +70	

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Type				HS18 – 2p	HS18 – 4p
Installation	Terminal type	bottom / top		lift / open-mouthed	
	Terminal size for cables	bottom / top	mm ²	10/6	
	Terminal size for PIN busbar	bottom / top	mm ²	10/16	
	Solid /stranded wiring			1x 1.5mm ² - 16mm ² 2 x 1.5mm ² - 6mm ² *	
	Flexible wires with or without ferrules			1x 1.5mm ² - 10mm ² 2 x 1.5mm ² - 6mm ² *	
	Tightening torque	bottom / top		1,2 Nm	
	Stripping length of the cable			10mm	
	Mounting			on DIN rail EN 60715 (35mm) by means of mounting clip	
	Mounting position			Any	
	Supply from			Top / bottom terminals	
	Dimensions (H x W x D)	Height	mm	86	86
		Width	mm	18	36
	Depth	mm	77	77	
	Weight	kg	0,074	0,148	
Packing	Packing A	QTY		1	1
		Dimensions (H x W x D)	mm	90 x 80 x 20	90 x 80 x 40
		Weight	kg	0,08	0,16
	Packing B (x A)	QTY		10	5
		Dimensions (H x W x D)	mm	225 x 97 x 86	
		Weight	kg	0,84	0,84
	Packing C (x B)	QTY		120	60
		Dimensions (H x W x D)	mm	44 x 292 x 185	
		Weight	kg	12	12
	CN-code			85362010	
	Combination with auxiliary elements	Auxiliary contact			NA
Signal contact / auxiliary contact			NA		
Shunt trip			NA		
Auxiliary contact for bottom fitting			NA		
Undervoltage release			NA		
Overvoltage release			NA		
Motor operating device			NA		

* Check local installation rules, this type of connection is not advised. Special add-on terminals are available.

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Performance in altitude*

Elevation [m]	2000	3000	4000	5000	6000
Rated current [A]	1 x In	0,95 x In	0,92 x In	0,90 x In	0,88 x In
Rated voltage [V]	1 x Un	0,85 x Un	0,75 x Un	0,65 x Un	0,55 x Un

* the isolator switch is designed for standard level operations, performance information on higher altitude is not available

Power loss component

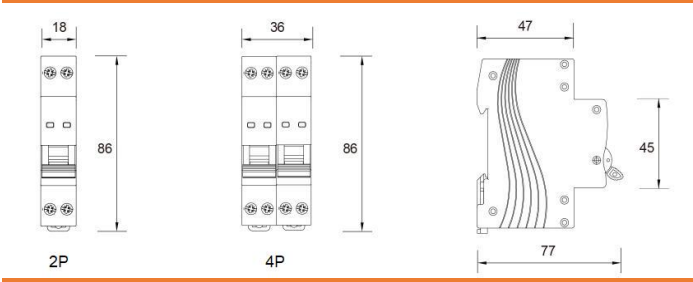
Inom (A)	HS18 2 pole (W)	HS18 4 pole (W)
25	0,66	1,32
40	1,69	3,38

Influence of adjacent devices

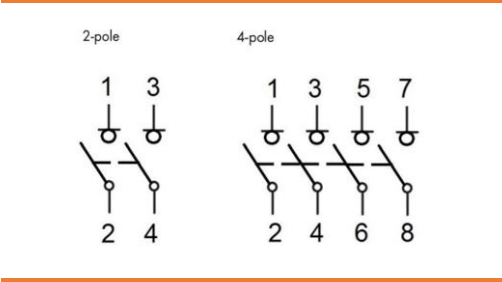
Number of devices	Correction factor
1	1
2-3	0,9
4-5	0,8
6-9	0,7
≥10	0,6

These values are provided by recommendation IEC 61439-1 and standards EN 61439-1. In order to avoid having to use these coefficients there must be good ventilation and the devices must be kept apart using the spacing element article number 2119000010 (0.5 module).

Overall dimensions




Connection diagram



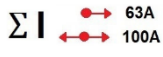
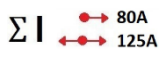
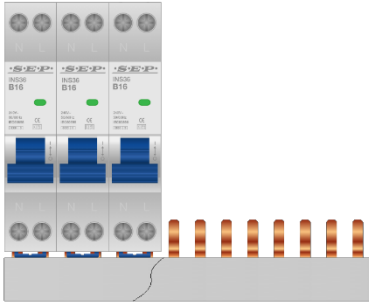
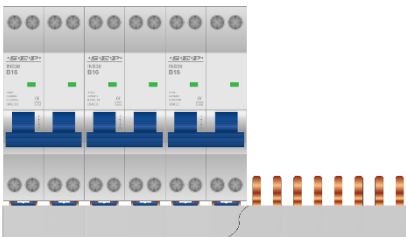

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Order codes

	Inom	HS18 - 2 pole	HS18 - 4 pole
	25 A	3102200025	3102400025
	40 A	3102200040	3102400040
	Terminal cover strip (yellow)	3102290010	3102490010

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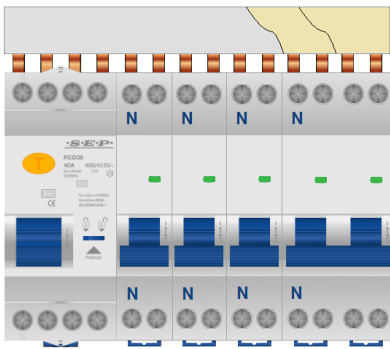
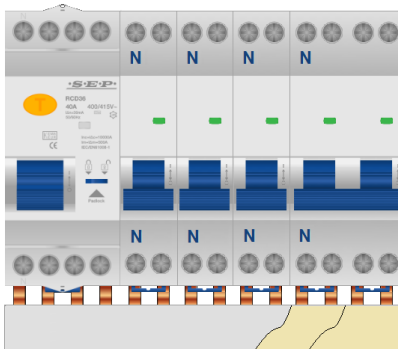

Order codes for connective rail

	HS18	HS18	10mm ² (closed end - non cuttable)  PIN	16mm ² (cut to size with end-caps)  PIN
Busbar / connective rail type				
2 pole (phase neutral) N1-N1-N1... 12-12-12 	3 4 5 6 8 9 10 12 18 24 54	- - - - - - - - - - -	2305122906 2305122908 2305122910 2305122912 2305122916 - 2305122920 2305122924 - - -	2306020906 2306020908 2306020910 2306020912 - 2306020918 - 2306020924 2306020936 2306020948 2306162200
4 pole (4 phase) 1234-1234... 	- - - - -	2 3 4 5 6	2305142808 2305142812 2305142816 2305142820 2305142824	- - - - -
	Open mouth covers for busbar PIN 9/18		2115900015	

* pictures are indicative – other combinations are possible

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Order codes for connective rail


Busbar / connective rail type*	4p (2 modules)	2p (1 modules)	10mm ² (closed end - non cuttable) ΣI  63A 100A
	No. devices	No. devices	PIN
Combination rail - top N123-N1-N2-N3-(N1 / N123) 	1	3	2305195910
	1	4	2305195912
	2	3	2305195914
Combination rail - bottom N123-N1-N2-N3-(N1 / N123) 	1	3	-
	1	4	2305194010
	2	3	2305194014
	Open mouth covers for busbar PIN 9/18		2115900015

* pictures are indicative – other combinations are possible


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Order codes accessories


Add-on terminals

Reference image	Wire size	PIN connection high		PIN connection Low	
		Grey	Blue	Grey	Blue
	2x10mm² solid/stranded 2x6mm² flexible	2115900040	2115900540	2115900041	2115900541

Marker - spacer

Reference image	Description	Code
	Component Spacer 0,5mm	2119000010

Lockout

Reference image	Description	Code
	Lockout set - complete	2115909099
	Locking devices adaptor	2115909015
	Locking device screw adaptor	2115909010
	Padlock with 2 identical keys	2115909020
	Warning tag (English)	2115909030