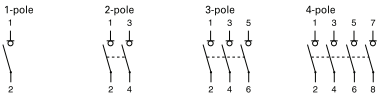
Description Main Load Disconnector Switch (Isolator) IS

- Load circuit breaker with isolating function
- Design according to IEC/EN 60947-3
- Highly wear resistant contacts
- Quick make, black toggle
- Terminal capacity 50 mm²
- Compatible busbars with switchgear series xPole by use of the mouth terminal in combination with standard fork busbar

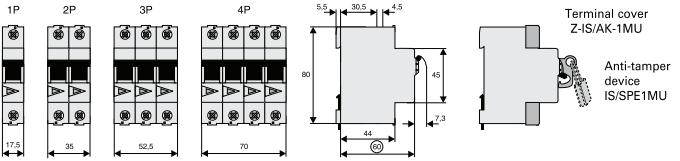
Technical Data

		IS-16	IS-20	IS-25	IS-32	IS-40	IS-63	IS-80	IS-100	IS-125
Electrical										
Design		according to IEC/EN 60947-3								
Rated voltage		240/415 V								
Frequency		50/60 Hz								
Rated insulation voltage	U_i	690 V~								
Rated peak withstand voltage	U_{imp}	6 kV								
Pollution degree		3								
Rated short-time withstand current	I_{cw}	2 kA								
Rated short-circuit making capacity	I_{cm}	2.8 kA								
Rated current 240/415 V, AC23A		16 A	20 A	25 A	32 A	40 A	63 A	80 A	100 A	125 A
Number of poles		1-, 2-, 3-, 4-pole								
Maximum back-up fuse		125 A gG								
Short-circuit current strength - with back-up fuse according to IEC/EN 60947-3		12.5 kA	12.5 kA	12.5 kA	12.5 kA	12.5 kA	12.5 kA	12.5 kA	10 kA	10 kA
Endurance										
operating cycles electrical components		≥ 3,000	≥ 3,000	≥ 3,000	≥ 3,000	≥ 3,000	≥ 3,000	≥ 3,000	≥ 3,000	≥ 2,000
operating cycles mechanical components		≥ 16,000	≥ 16,000	≥ 16,000	≥ 16,000	≥ 16,000	≥ 16,000	≥ 16,000	≥ 16,000	≥ 14,000
Mechanical										
Frame size		45 mm								
Device height		80 mm								
Device width		17.5 mm/pole								
Mounting		quick fastening with 2 lock-in positions on DIN rail IEC/EN 60715								
Degree of protection, built-in		IP40								
Terminal protection		finger and hand touch safe according to DGUV VS3, EN 50274								
Upper and lower terminals		Twin-purpose terminals								
Terminal capacity		2.5 - 50 mm²								
Busbar thickness		0.8 - 2 mm								
Tightening torque of terminal screws		2.5 - 5 Nm								
Function		irrespective of the position of installation								

Connection diagram



Dimensions (mm)



Influence of ambient temperature on load carrying capacity (Temperature Derating)

	Ambient temperature °C								
Type	**-35**	**-25**	**-10**	**5**	**30**	**40**	**55**	**65**	**75**
IS-16	23.8	22.6	20.8	19.0	16	14.8	13.0	11.8	10.6
IS-20	29.8	28.3	26.0	23.8	20	18.5	16.3	14.8	13.3
IS-25	37.2	35.3	32.5	29.7	25	23.1	20.3	18.4	16.6
IS-32	47.6	45.2	41.6	38.0	32	29.6	26.0	23.6	21.2
IS-40	59.5	56.5	52.0	47.5	40	37.0	32.5	29.5	26.5
IS-63	93.7	89.0	81.9	74.8	63	58.3	51.2	46.5	41.7
IS-80	132	124	112	100	80	72.0	60.0	52.0	44.0
IS-100	165	155	140	125	100	90.0	75.0	65.0	55.0
IS-125	206	194	175	156	125	112	93.8	81.3	68.8

Values in the table display the nominal current (Ie) in ampere depending on the ambient temperature

NOTE: Actual current should not exceed the stated current for the respective ambient temperature