

Data Sheet for Article: AM618350--

Miniature Circuit Breaker (MCB) AMPARO 6kA, B 50A, 3-pole

Product category AM6, Product standard EN 60898-1:2019, IEC 60898-1



Schrack Info

- Double lift and clamp terminals on both sides
- Neutral on the left side
- Back terminal protection for safe connection
- Terminal cross section: 1 - 25mm²
- Snap-on mounting for DIN rail EN 60715

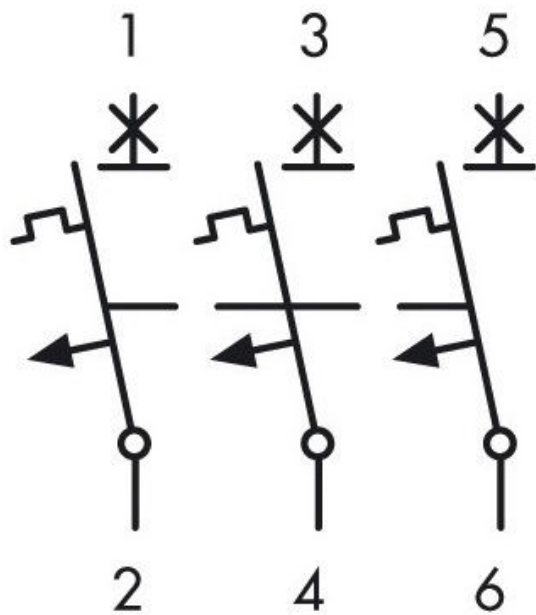
Technical Data

Standard	IEC 60898-1 EN 60898-1
Rated voltage	230/400 - 240/415V
Rated frequency (Hz)	50/ 60
Tripping characteristics	B
Rated current (A)	50
Poles	3
Short circuit withstand	6 kA (IEC/EN 60898)
Rated impulse withstand voltage Uimp	4kV
Energy limiting class	3

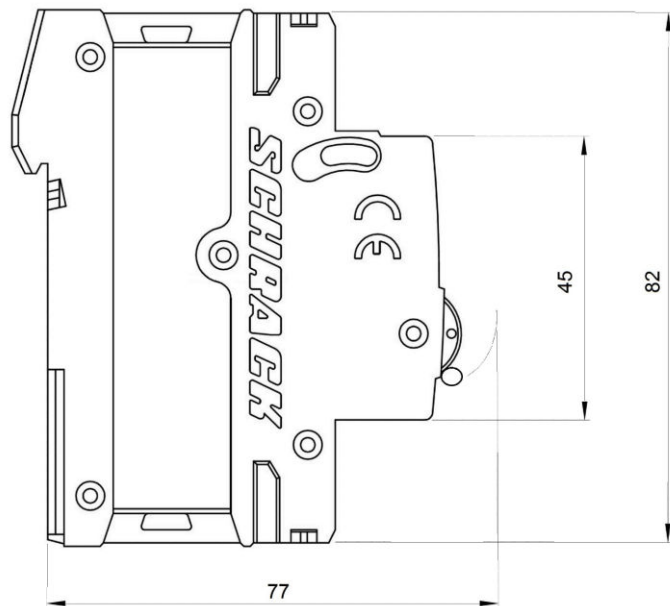
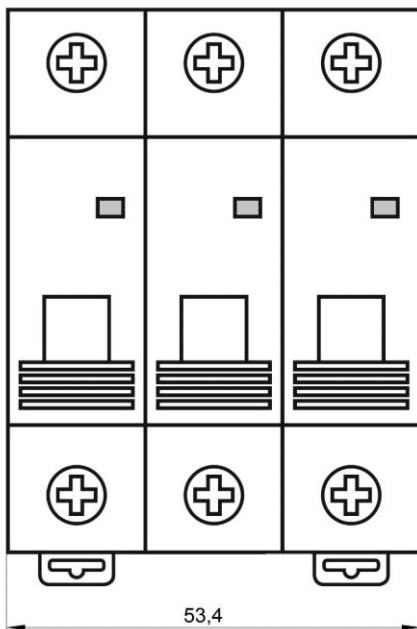
Technical Data - continued

Test voltage (V)	2000
Pollution degree	2
Power loss (W)	17,25
Internal resistance	50A: 1.226mΩ
Lifetime, electric	4000 Operations
Lifespan, mechanical	20000 Operations
IP Rating	IP20
Connections	both sides
Terminal cross section (mm²)	1-25
Clamp size for busbar	10 mm²
Conductor material	Copper
Terminal type	Double Mouth Lift Clamp with Back clamps Protection
Torque	2.5 Nm
Calibration-Temperature (°C)	30
Temperature range - Operation (°C)	-35 to +70
Ambient temperature Open (°C)	-5°C bis +40
Mounting	On DIN rail according to EN 60715 (35mm) via quick mounting clip
Optional Accessories	AM900099--;BSB90113-A;BSB90114-A;BSB90155-A;AM900008--;AM900006--;AM900005--
Mounting position	any
Amperage (A)	50
Product category	AM6
Rated breaking capacity (kA)	6
Product standard	IEC 60898-1 EN 60898-1:2019

Schaltbild

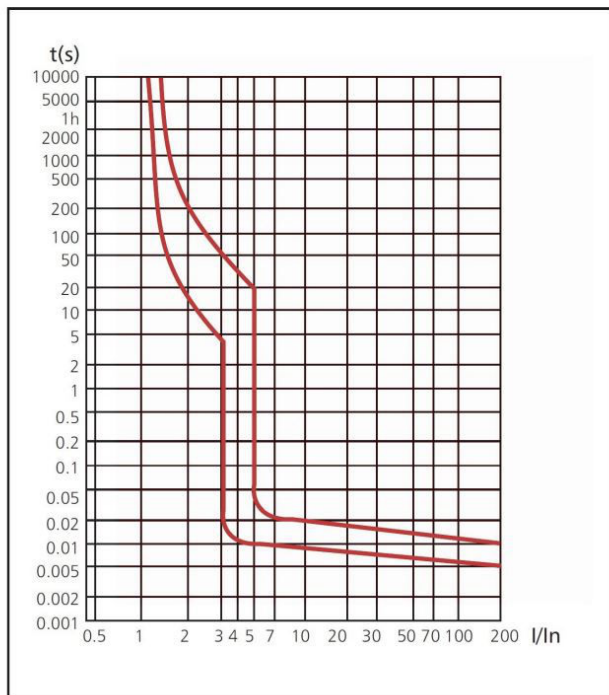


Maßbild



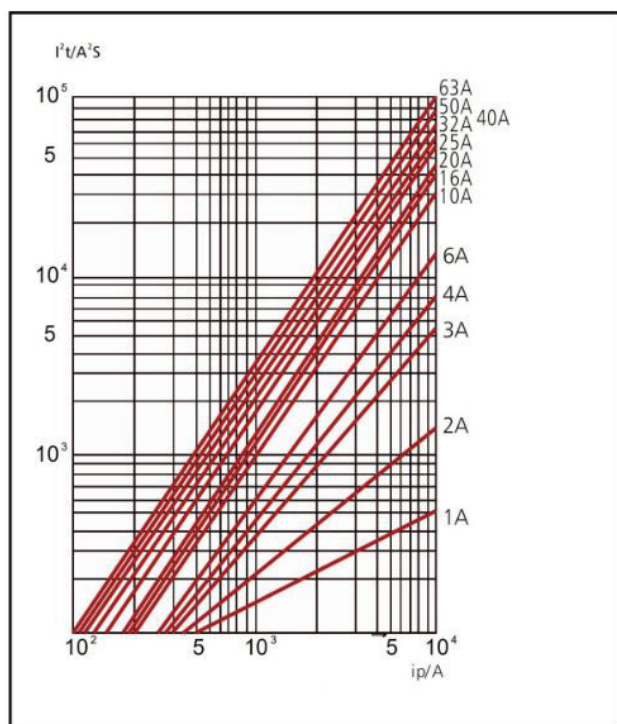
Auslösecharakteristik nach IEC 60898

Kennlinie B



Durchlassenergie-Kennlinie

I^2t Durchlassenergie/ let-through energy



Influence of ambient temperature on tripping current

In	Ambient temperature [°C]											
	-35°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
2A	2.60	2.52	2.46	2.38	2.28	2.20	2.08	2.00	1.92	1.86	1.76	1.66
4A	5.20	5.04	4.92	4.76	4.56	4.40	4.16	4.00	3.84	3.76	3.52	3.32
6A	7.80	7.56	7.38	7.14	6.84	6.60	6.24	6.00	5.76	5.64	5.28	4.98
10A	13.20	12.70	12.50	12.00	11.50	11.10	10.60	10.00	9.60	9.30	8.90	8.40
16A	21.12	20.48	20.00	19.20	18.40	17.76	16.96	16.00	15.36	14.88	14.24	13.44
20A	26.40	25.60	25.00	24.00	23.00	22.20	21.20	20.00	19.20	18.60	17.80	16.80
25A	33.00	32.00	31.25	30.00	28.75	27.75	26.50	25.00	24.00	23.25	22.25	21.00
32A	42.56	41.28	40.00	38.72	37.12	35.52	33.92	32.00	30.72	29.76	28.16	26.88
40A	53.20	51.20	50.00	48.00	46.40	44.80	42.40	40.00	38.40	37.20	35.60	33.60
50A	67.00	65.50	63.00	60.50	58.00	56.00	53.00	50.00	48.00	46.50	44.00	41.50
63A	83.79	81.90	80.01	76.86	73.71	70.56	66.78	63.00	60.48	58.90	55.44	52.29

Selectivity to Fuses characteristic gG/gL

	Power supply side: fuse characteristic gG/gL									
	IN	20A	25A	36A	50A	63A	80A	100A	125A	150A
Load side: MCB, series AMPARO characteristic B and C	2A	1.2 kA	4 kA	6 kA	6 kA	6 kA	6 kA	6 kA	6 kA	6 kA
	4A	0.6 kA	0.9 kA	2.5 kA	3.8 kA	6 kA	6 kA	6 kA	6 kA	6 kA
	6A	0.5 kA	0.8 kA	1.9 kA	2.5 kA	4.5 kA	5 kA	6 kA	6 kA	6 kA
	10A	-	0.7 kA	1.4 kA	2.2 kA	3.2 kA	3.6 kA	6 kA	6 kA	6 kA
	16A	-	-	1.2 kA	1.8 kA	2.6 kA	3 kA	5.6 kA	6 kA	6 kA
	20A	-	-	-	1.5 kA	2.2 kA	2.5 kA	4.6 kA	6 kA	6 kA
	25A	-	-	-	1.3 kA	2 kA	2.2 kA	4.1 kA	5.5 kA	6 kA
	32A	-	-	-	-	1.7 kA	1.9 kA	3.8 kA	4.5 kA	6 kA
	40A	-	-	-	-	-	1.7 kA	3 kA	4 kA	5 kA
	50A	-	-	-	-	-	1.5 kA	2.6 kA	3.5 kA	4.5 kA
	60A	-	-	-	-	-	-	2.4 kA	3.3 kA	4.5 kA

Selectivity to MCCB type MC1

Power supply side: MCCB type MC1						
Load side: MCB, series AMPARO characteristic B	I_N	40 A	50 A	63 A	80 A	100 A
	2A	2 kA	6 kA	6 kA	6 kA	6 kA
	4A	1.2 kA	2 kA	3 kA	3 kA	6 kA
	6A	1.2 kA	2 kA	2.5 kA	3 kA	5 kA
	10A	1.2 kA	1.5 kA	2 kA	2 kA	4 kA
	16A	1 kA	1.2 kA	1.5 kA	2 kA	3 kA
	20A	0.8 kA	1.2 kA	1.5 kA	1.5 kA	3 kA
	25A	0.7 kA	1.2 kA	1.5 kA	1.5 kA	3 kA
	32A	-	1.2 kA	1 kA	1.5 kA	2 kA
	40A	-	-	1 kA	1.5 kA	2 kA
	50A	-	-	-	1.2 kA	1.5 kA
	63A	-	-	-	-	1.5 kA

Selectivity to MCCB type MC1

Power supply side: MCCB type MC1						
Load side: MCB, series AMPARO characteristic C	I_N	40 A	50 A	63 A	80 A	100 A
	2A	2 kA	6 kA	6 kA	6 kA	6 kA
	4A	1.2 kA	2 kA	3 kA	3 kA	6 kA
	6A	1.2 kA	2 kA	2.5 kA	3 kA	5 kA
	10A	1.2 kA	1.5 kA	2 kA	2 kA	4 kA
	16A	1 kA	1.2 kA	1.5 kA	2 kA	3 kA
	20A	0.8 kA	1.2 kA	1.5 kA	1.5 kA	3 kA
	25A	0.7 kA	1.2 kA	1.5 kA	1.5 kA	3 kA
	32A	-	1.2 kA	1 kA	1.5 kA	2 kA
	40A	-	-	1 kA	1.5 kA	2 kA
	50A	-	-	-	1.2 kA	1.5 kA
	63A	-	-	-	-	1.5 kA

Selectivity to MCCB type MC2

Power supply side: MCCB type MC2						
Load side: MCB, series AMPARO characteristic B	I _N	40 A	50 A	63 A	80 A	100 A
	2A	3 kA	6 kA	6 kA	6 kA	6 kA
	4A	1.2 kA	1.5 kA	3 kA	4 kA	6 kA
	6A	1.2 kA	1.5 kA	2.5 kA	3 kA	6 kA
	10A	1 kA	1.5 kA	2.5 kA	3 kA	6 kA
	13A	1 kA	1.2 kA	2 kA	3 kA	6 kA
	16A	1 kA	1.2 kA	1.5 kA	2.5 kA	6 kA
	20A	1 kA	1.2 kA	1.5 kA	2 kA	6 kA
	25A	0.8 kA	1 kA	1.5 kA	2 kA	6 kA
	32A		1 kA	1.5 kA	2 kA	6 kA
	40A			1.2 kA	1.5 kA	6 kA
	50A				1.5 kA	6 kA
	63A					6 kA

Selectivity to MCCB type MC2

Power supply side: MCCB type MC2						
Load side: MCB, series AMPARO characteristic C	I _N	40 A	50 A	63 A	80 A	100 A
	2A	3 kA	6 kA	6 kA	6 kA	6 kA
	4A	1.2 kA	1.5 kA	3 kA	4 kA	6 kA
	6A	1.2 kA	1.5 kA	2.5 kA	3 kA	6 kA
	10A	1 kA	1.5 kA	2.5 kA	3 kA	6 kA
	13A	1 kA	1.2 kA	2 kA	3 kA	6 kA
	16A	1 kA	1.2 kA	1.5 kA	2.5 kA	6 kA
	20A	1 kA	1.2 kA	1.5 kA	2 kA	6 kA
	25A	0.8 kA	1 kA	1.5 kA	2 kA	6 kA
	32A		1 kA	1.5 kA	2 kA	6 kA
	40A			1.2 kA	1.5 kA	6 kA
	50A				1.5 kA	6 kA
	63A					6 kA

Number of possible wires

Cross-section [mm ²]	Number of rigid single wire conductors					
	1	2	3	4	5	6
1	+	+	+	+	+	+
1.5	+	+	+	+	+	+
2.5	+	+	+	-	-	-
4	+	+	+	-	-	-
6	+	+	+	-	-	-

Cross-section [mm ²]	Number of rigid multi wire conductors					
	1	2	3	4	5	6
10	+	+	-	-	-	-
16	+	-	-	-	-	-
25	+	-	-	-	-	-

Cross-section [mm ²]	Number of flexible single wire conductors (without ferrule)					
	1	2	3	4	5	6
1	+	+	+	+	+	+
1.5	+	+	+	+	+	+
2.5	+	+	+	+	-	-
4	+	+	+	-	-	-
6	+	+	-	-	-	-
10	+	+	-	-	-	-
16	+	-	-	-	-	-
25	+	-	-	-	-	-

Cross-section [mm ²]	Number of flexible single wire conductors (with ferrule)					
	1	2	3	4	5	6
1	+	-	-	-	-	-
1.5	+	-	-	-	-	-
2.5	+	-	-	-	-	-
4	+	-	-	-	-	-
6	+	-	-	-	-	-
10	+	-	-	-	-	-
16	+	-	-	-	-	-
25	-	-	-	-	-	-

Article Table

DESCRIPTION	COPPER WEIGHT (kg/km)	Order No.
Miniature Circuit Breaker (MCB) AMPARO 6kA, B 50A, 3-pole Product category AM6, Product standard EN 60898-1:2019, IEC 60898-1		AM618350
Optional Accessories		
Auxiliary Contact 1 CO, series AMPARO snap-on Product category AM6, Product standard EN 60947-5-1:2017		AM900099
Busbar fork 3-pole, 10mm ² , 1m Not possible to break off, shortenable on both sides, TE=17.8mm	480	BSB90113-A
Busbar fork 3-pole, 16mm ² , 1m Not possible to break off, shortenable on both sides, TE=17.8mm	670	BSB90114-A
Busbar, 12x MCB 1-pole or 4x MCB 3-pole, 12 MW, 10 mm ² Compact-Busbar, Forkbusbar, 3-pole, not possible to break off, No end caps required	81	BSB90155-A
Undervoltage Release 230VAC, series AMPARO, snap-on Product category AM6, Product standard EN 60947-5-1:2004 + A1:2009		AM900008
Shunt Release 230V/400VAC, series AMPARO, snap-on Product category AM6, Product standard EN 60947-5-1:2004 + A1:2009		AM900006
Shunt Release 24VAC/DC, series AMPARO, snap-on Product category AM6, Product standard EN 60947-5-1:2004 + A1:2009		AM900005