

Technický list produktu (datasheet): AM018304UL

Miniature Circuit Breaker AMPARO 5kA, B 4A, 3-pole, UL1077

Product category AM10, Neutral on right side, Product standard EN 60898-1, IEC 60898-1, UL1077



Schrack Info

- Contact position indicator
- Lift und Clamp terminals on both sides
- Back terminal design for safe connection
- Neutral on right side
- Terminal cross-section: 1-25mm²
- Snap-on mounting for DIN rail according to EN 60715
- Compliant to the product standard UL1077

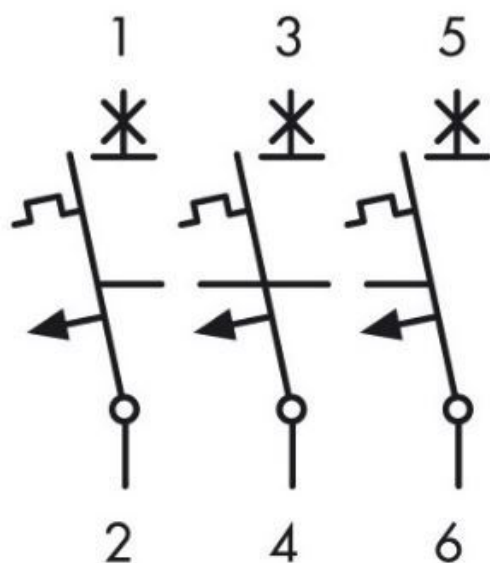
Technické informace

Normy a standardy	IEC 60898-1 UL1077 EN 60898-1
Jmenovité napětí	230/400 - 240/415 V
Jmenovitá frekvence (Hz)	50/60
Charakteristika	B

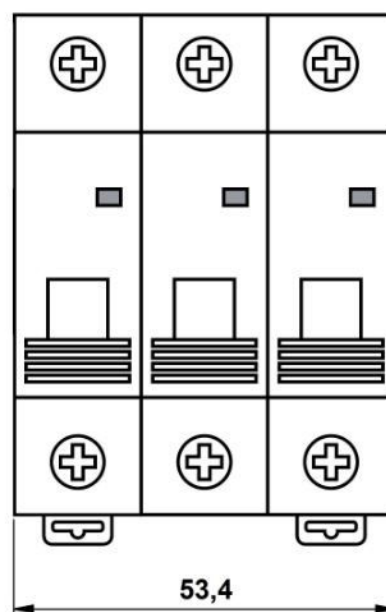
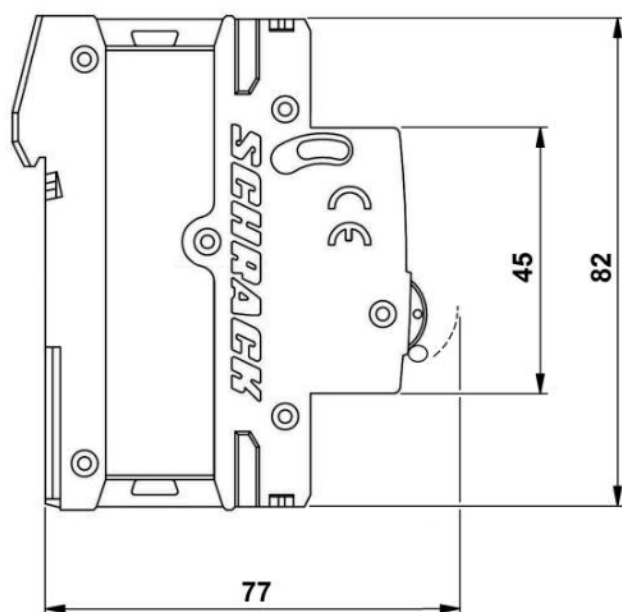
Technické informace - Pokračování

Jmenovitý proud (A)	4
Pólů	3
Zkratová odolnost	10 kA (IEC/EN 60898) , 5 kA (UL 1077)
Odolnost impulsnímu napětí Uimp:	6kV
Třída selektivity	3
Testovací napětí (V)	2000
Stupeň znečištění	2
Ztrátový výkon (W)	6,00
Vnitřní odpor	4A: 94.007mΩ
Životnost, elektrická	4000 pracovních cyklů
Životnost, mechanická	20 000 spínacích cyklů
Stupeň ochrany krytí	IP20
Připojovací průřezy (mm²)	1 - 25
Velikost svorky pro propojovací lištu	10 mm² / 16 mm²
Vodič	Copper
Svorky	Vodič / propojovací lišta jazýčková nebo vidlicová
Kalibrace - teplota (°C)	30
Teplotní podmínky - provozní (°C)	-25 až +70
Ambient Temperature - nominal Tripping (°C)	-5 to +40
Instalace	Na lištu DIN dle EN 60715 (35mm) pomocí rychlomontážní svorky
Volitelné příslušenství	AM900099--;BSB90113-A;BSB90114-A;AM900008--;AM900006--;AM900005--
Montážní poloha	jakákoli
Certifikáty	UL 1077, File No. E195102
Jmenovitý proud (A)	4
Typ	AM10
Spínací schopnost (kA)	10
Norma	IEC 60898-1 EN 60898-1:2019

Circuit diagram



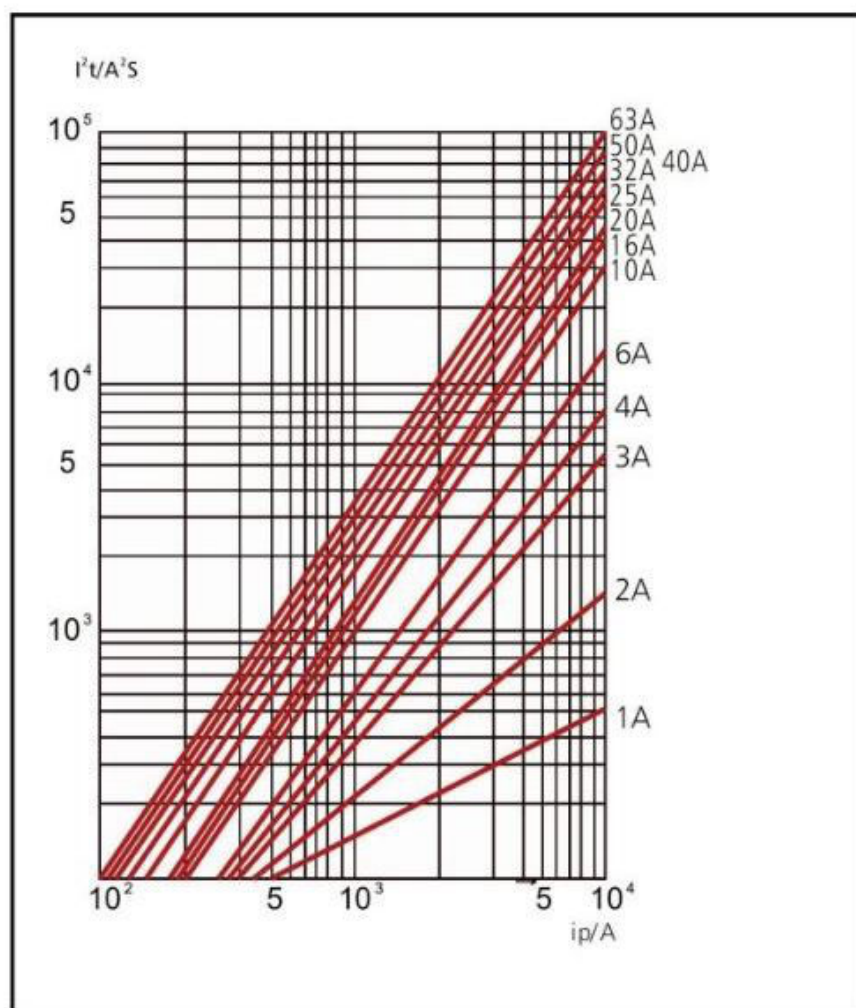
Dimensions



[mm]

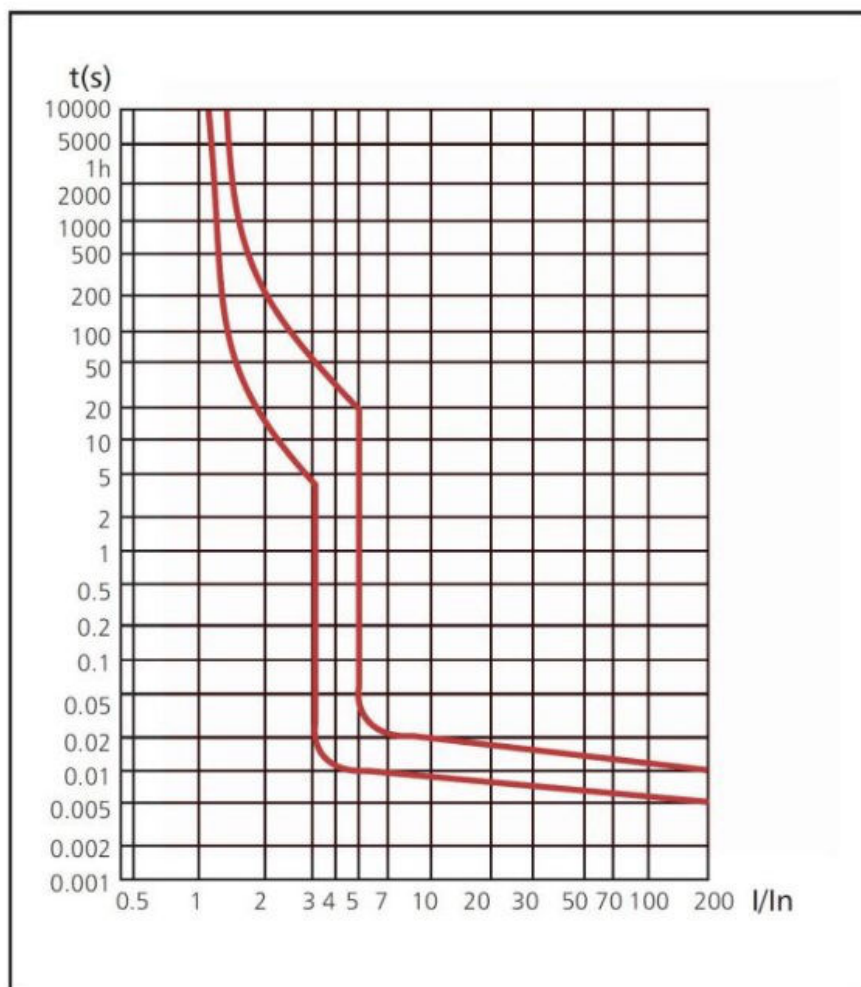
Let-through energy characteristic

I^2t Durchlassenergie/ let-through energy



Tripping characteristic according to IEC 60898

Kennlinie B



Short-circuit selectivity to D/D0 and cylindrical fuse links with characteristic curve gG/gL

I _n	16A	20A	25A	35A	50A	63A	80A	100A
≤2A	0.5 kA	0.8 kA	1.6 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
3A	0.5 kA	0.8 kA	1.4 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
4A	0.5 kA	0.6 kA	1.0 kA	3.6 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
6A	0.5 kA	0.6 kA	0.9 kA	1.8 kA	3.2 kA	7.4 kA	10.0 kA	10.0 kA
10A	-	0.5 kA	0.8 kA	1.4 kA	2.2 kA	3.9 kA	6.0 kA	10.0 kA
13A	-	0.5 kA	0.7 kA	1.3 kA	2.0 kA	3.6 kA	5.4 kA	10.0 kA
16A	-	-	0.6 kA	1.2 kA	1.9 kA	3.2 kA	4.6 kA	8.4 kA
20A	-	-	-	1.2 kA	1.8 kA	3.1 kA	4.4 kA	4.6 kA
25A	-	-	-	1.2 kA	1.8 kA	3.0 kA	4.2 kA	4.1 kA
32A	-	-	-	-	1.7 kA	2.8 kA	3.9 kA	3.8 kA
40A	-	-	-	-	-	2.7 kA	3.8 kA	3 kA
50A	-	-	-	-	-	2.5 kA	3.5 kA	2.6 kA
63A	-	-	-	-	-	-	-	2.4 kA

Short-circuit selectivity to NH fuses with characteristic curve gG/gL

I _n	16A	20A	25A	35A	40A	50A	63A	80A	100A	125A	160A
≤2A	0.5 kA	0.5 kA	1.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
3A	0.5 kA	0.5 kA	0.9 kA	8.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
4A	0.5 kA	0.5 kA	0.8 kA	2.3 kA	4.3 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
6A	0.5 kA	0.5 kA	0.7 kA	1.5 kA	2.0 kA	3.3 kA	4.3 kA	7.6 kA	10.0 kA	10.0 kA	10.0 kA
10A	-	0.5 kA	0.6 kA	1.2 kA	1.5 kA	2.2 kA	2.7 kA	4.0 kA	9.0 kA	10.0 kA	10.0 kA
13A	-	0.5 kA	0.6 kA	1.1 kA	1.4 kA	2.1 kA	2.6 kA	3.8 kA	7.9 kA	10.0 kA	10.0 kA
16A	-	-	0.5 kA	1.0 kA	1.3 kA	1.9 kA	2.4 kA	3.4 kA	6.4 kA	9.3 kA	10.0 kA
20A	-	-	-	1.0 kA	1.3 kA	1.9 kA	2.4 kA	3.3 kA	6.0 kA	8.7 kA	10.0 kA
25A	-	-	-	1.0 kA	1.3 kA	1.8 kA	2.3 kA	3.2 kA	5.7 kA	8.0 kA	10.0 kA
32A	-	-	-	0.9 kA	1.2 kA	1.7 kA	2.2 kA	3.1 kA	5.4 kA	7.6 kA	10.0 kA
40A	-	-	-	-	-	-	2.1 kA	3.0 kA	5.1 kA	7.2 kA	10.0 kA
50A	-	-	-	-	-	-	1.9 kA	2.8 kA	4.7 kA	6.6 kA	9.5 kA
63A	-	-	-	-	-	-	-	-	4.4 kA	6.3 kA	8.6 kA

Short-circuit selectivity to circuit breaker size 1

I _{cu} = 25kA (50 kA)	40A	50A	63A	80A	100A	125A
1A	15 kA	15kA	15kA	15kA	15kA	15kA
2A	2 kA	15 kA	15 kA	15 kA	15 kA	15 kA
3A	1.2 kA	2 kA	3 kA	3 kA	10 kA	15 kA
4A	1.2 kA	2 kA	3 kA	3 kA	8 kA	15 kA
6A	1.2 kA	2 kA	2.5 kA	3 kA	5 kA	10 kA
10A	1.2 kA	1.5 kA	2 kA	2 kA	4 kA	10 kA
13A	1 kA	1.5 kA	2 kA	2 kA	4 kA	10 kA
16A	1 kA	1.2 kA	1.5 kA	2 kA	3 kA	8 kA
20A	0.8 kA	1.2 kA	1.5 kA	1.5 kA	3 kA	8 kA
25A	0.7 kA	1.2 kA	1.5 kA	1.5 kA	3 kA	7 kA
32A	-	1.2 kA	1 kA	1.5 kA	2 kA	6 kA
40A	-	-	1 kA	1.5 kA	2 kA	5 kA
50A	-	-	-	1.2 kA	1.5 kA	4 kA
63A	-	-	-	-	1.5 kA	3 kA

Short-circuit selectivity to circuit breaker size 2

I _{cu} =25kA (50kA), (100kA), (150kA)	40A	50A	63A	80A	100A	125A	160A	200A	250A
1A	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
2A	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA	15 kA
3A	1.5 kA	1.5 kA	3 kA	5 kA	15 kA	15 kA	15 kA	15 kA	15 kA
4A	1.2 kA	1.5 kA	3 kA	4 kA	15 kA	15 kA	15 kA	15 kA	15 kA
6A	1.2 kA	1.5 kA	2.5 kA	3 kA	15 kA	15 kA	15 kA	15 kA	15 kA
10A	1 kA	1.5 kA	2.5 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
13A	1 kA	1.2 kA	2 kA	3 kA	10 kA	10 kA	10 kA	10 kA	10 kA
16A	1 kA	1.2 kA	1.5 kA	2.5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
20A	1 kA	1.2 kA	1.5 kA	1.5 kA	10 kA	10 kA	10 kA	10 kA	10 kA
25A	0.8 kA	1kA	1.5 kA	2 kA	10 kA	10 kA	10 kA	10 kA	10 kA
32A	-	1 kA	1.5 kA	2 kA	8 kA	8 kA	8 kA	8 kA	10 kA
40A	-	-	1.2 kA	1.5 kA	7 kA	7 kA	7 kA	7 kA	10 kA
50A	-	-	-	1.5 kA	6 kA	6 kA	6 kA	6 kA	10 kA
63A	-	-	-	-	6 kA	6 kA	6kA	6 kA	10 kA

Influence of the ambient temperature on the thermal tripping behavior

I _n (A)	Ambient temperature T (°C)											
	-35	-30	-20	-10	0	10	20	30	40	50	60	70
1	1.30	1.26	1.23	1.19	1.15	1.11	1.05	1.00	0.96	0.93	0.88	0.83
2	2.60	2.52	2.46	2.38	2.28	2.20	2.08	2.00	1.92	1.86	1.76	1.66
3	3.90	3.78	3.69	3.57	3.42	3.30	3.12	3.00	2.88	2.79	2.64	2.49
4	5.20	5.04	4.92	4.76	4.56	4.40	4.16	4.00	3.84	3.76	3.52	3.32
6	7.80	7.56	7.38	7.14	6.84	6.60	6.24	6.00	5.76	5.64	5.28	4.98
10	13.20	12.70	12.50	12.00	11.50	11.10	10.60	10.00	9.60	9.30	8.90	8.40
16	21.12	20.48	20.00	19.20	18.40	17.76	16.96	16.00	15.36	14.88	14.24	13.44
20	26.40	25.60	25.00	24.00	23.00	22.20	21.20	20.00	19.20	18.60	17.80	16.80
25	33.00	32.00	31.25	30.00	28.75	27.75	26.50	25.00	24.00	23.25	22.25	21.00
32	42.56	41.28	40.00	38.72	37.12	35.52	33.92	32.00	30.72	29.76	28.16	26.88
40	53.20	51.20	50.00	48.00	46.40	44.80	42.40	40.00	38.40	37.20	35.60	33.60
50	67.00	65.5	63.00	60.50	58.00	56.00	53.00	50.00	48.00	46.50	44.00	41.50
63	83.79	81.90	80.01	76.86	73.71	70.56	66.78	63.00	60.48	58.90	55.44	52.29

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	-	-	-	-	-	-

Tabulka objednacích čísel

POPIS	OBSAH MĚDI (kg/km)	OBJ. ČÍSLO
Miniature Circuit Breaker AMPARO 5kA, B 4A, 3-pole, UL1077 Product category AM10, Neutral on right side, Product standard EN 60898-1, IEC 60898-1, UL1077		AM018304UL
Volitelné příslušenství		
Pomocný kontakt AMPARO, 1P (1CO) kompatibilní s jističi a kombinovanými jističi s chrániči, zacvakávací montáž, 1 přepínací kontakt, IEC 60947-5-1		AM900099
Vidlicová lišta 3 pólová 10mm ² , 1m, pro BC, BM, BO a Amparo kompatibilní s BC, BM, BO a Amparo, nevylamovatelná, lze zkrátit z obou stran, TE=17.8	480	BSB90113-A
Vidlicová lišta 3-pólová 16mm ² , 1m, pro BC, BM, BO a Amparo kompatibilní s BC, BM, BO a Amparo, nevylamovatelná, lze zkrátit z obou stran, TE=17.8	670	BSB90114-A
Podpěřová cívka série AMPARO, 230 VAC zacvakávací montáž, IEC/ČSN EN 60947-5-1		AM900008
Vypínací cívka AMPARO, 1P(1CO), 230/400 V AC kompatibilní s jističi a kombinovanými přístroji AMPARO, zacvakávací montáž, IEC/ČSN EN 60947-5-1		AM900006
Vypínací cívka AMPARO, 24 V AC/DC zacvakací montáž, IEC/ČSN EN 60947-5-1		AM900005