

Dane techniczne dla produktu: AM018410UL

Miniature Circuit Breaker AMPARO 5kA, B 10A, 4-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

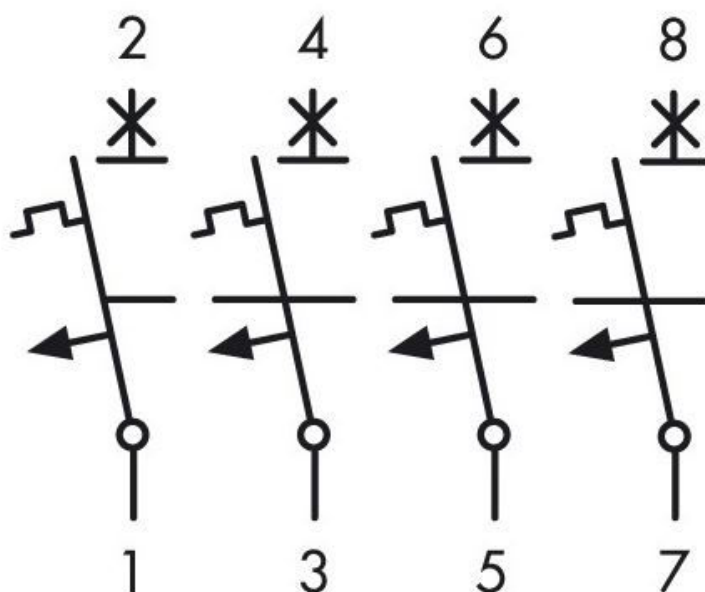
Dane techniczne

Norma / standard	IEC 60898-1 UL1077 EN 60898-1
Napięcie znamionowe	230/400 - 240/415V
Częstotliwość znamionowa (Hz)	50/60
Charakterystyka wyzwalania	B

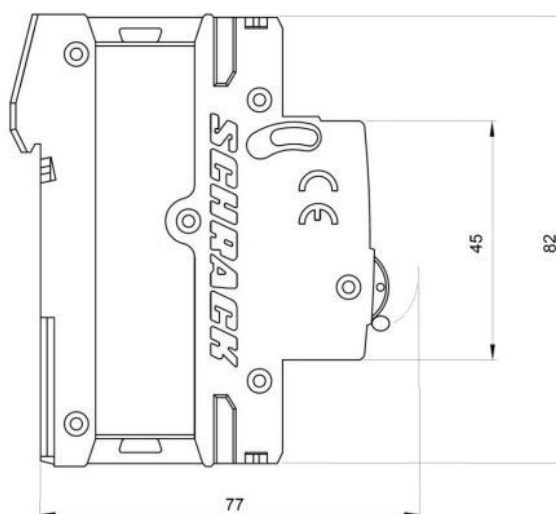
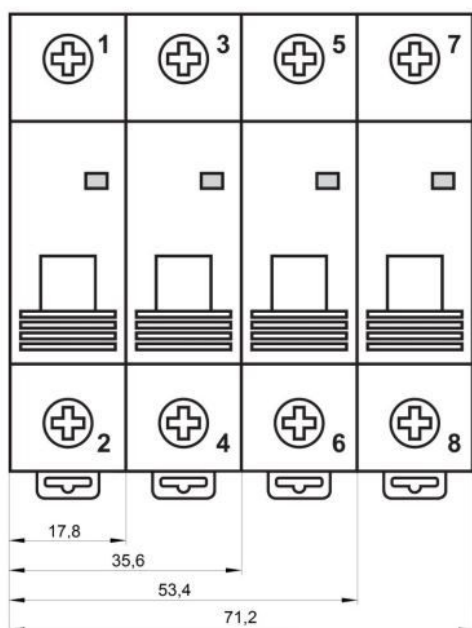
Dane techniczne - kontynuacja

Prąd znamionowy (A)	10
Liczba biegunów	4
Wytrzymałość zwarciowa	10 kA (IEC/EN 60898) , 5 kA (UL 1077)
Znamionowe napięcie udarowe wytrzymywane Uimp	6kV
Energy limiting class	3
Napięcie testowe (V)	2000
Stopień zanieczyszczenia	2
Straty mocy (W)	8,00
Internal resistance	10A: 9.989mΩ
Lifetime, electric	4000 Operations
Lifespan, mechanical	20000 Operations
Stopień szczelności	IP20
Terminal cross section (mm²)	1 - 25
Clamp size for busbar	10 mm² / 16 mm²
Budowa żyły kabla	miedź
Typ zacisków	zacisk dwufunkcyjny-montaż szyną łączeniową języczkową i widelkową
Calibration-Temperature (°C)	30
Zakres temperaturowy - Eksploatacja (°C)	od -25 do +70
Ambient Temperature - nominal Tripping (°C)	-5 to +40
Montaż	zatraskowy na szynie DIN (35mm), zgodnie z EN 60715
Dodatkowe akcesoria	AM900099--;BSB90113-A;BSB90114-A;AM900008--;AM900006--;AM900005--
Pozycja montażowa	Dowolna
Certificates	UL 1077, File No. E195102
Prąd znamionowy (A)	10

Circuit diagram



Dimensions



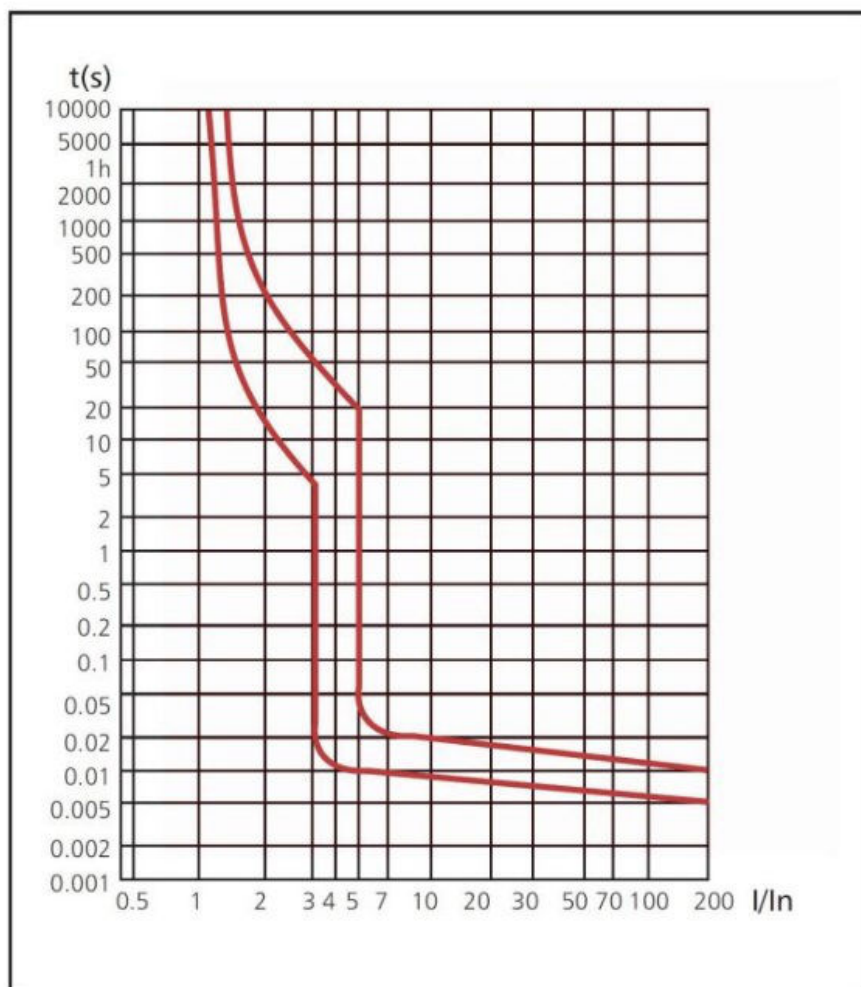
Let-through energy characteristic

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

In	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

In	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	-	-	-	-	-	-

Lista produktów

OPIS	Waga miedzi (kg/km)	Nr katalogowy
Miniature Circuit Breaker AMPARO 5kA, B 10A, 4-pole, UL1077 Product category AM10, Neutral on right side, Product standard EN 60898-1, IEC 60898-1, UL1077		AM018410UL
Dodatkowe akcesoria		
Styk pomocniczy, 1 przełączny, seria AMPARO AK Styk pasuje do serii AM		AM900099
Szyna grzebieniowa 1m, 3P, 10mm ² Szyna łączeniowa, zbiorcza, izolowana, wersja widelkowa, 3-biegunowa, rozstaw 18 mm, bez możliwości wyłamywania	480	BSB90113-A
Szyna grzebieniowa 1m, 3P, 16mm ² Szyna łączeniowa, zbiorcza, izolowana, wersja widelkowa, 3-biegunowa, rozstaw 18 mm, bez możliwości wyłamywania	670	BSB90114-A
Wyzwalacz podnapięciowy 230VAC do wyl. instalacyjnych AMPARO IEC/EN 60947-5-1		AM900008
Wyzwalacz 230V/400V AC, do wyłączników instalacyjnych AMPARO IEC/EN 60947-5-1		AM900006
Wyzwalacz 24V AC/DC, do wyłączników instalacyjnych AMPARO IEC/EN 60947-5-1		AM900005