

Технический паспорт изделия : AM017820UL

Miniature Circuit Breaker AMPARO 5kA, C 20A, 3+N, 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

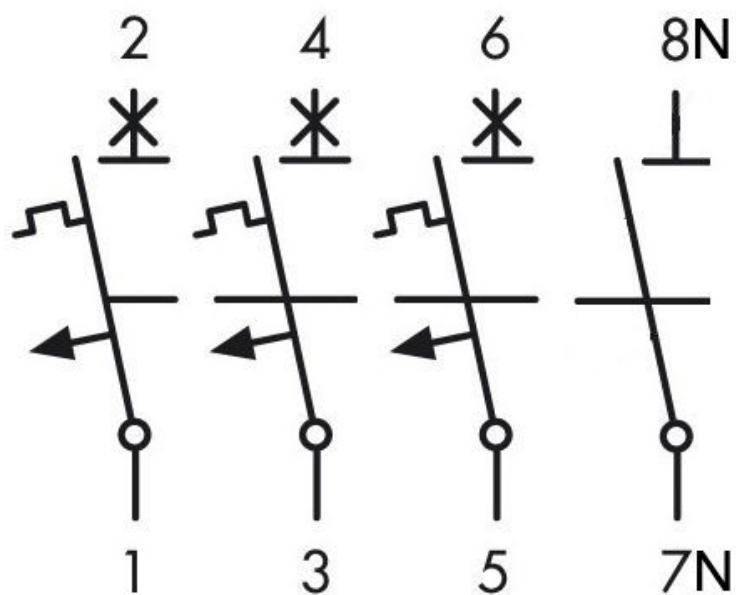
Технические данные

Стандарт	IEC 60898-1 UL1077 EN 60898-1
Rated frequency (Hz)	50/60
Характеристика	C
Номинальный ток (A)	20

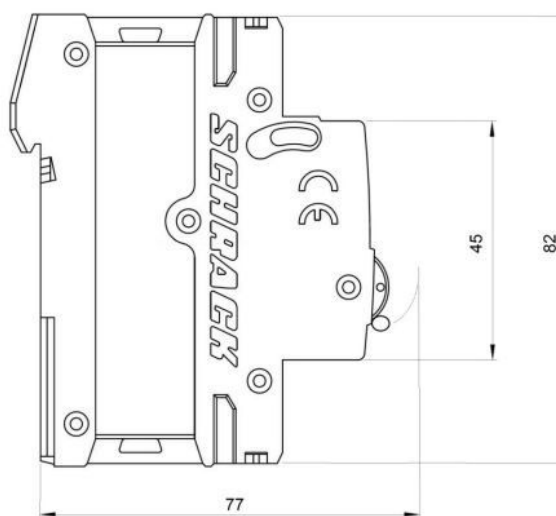
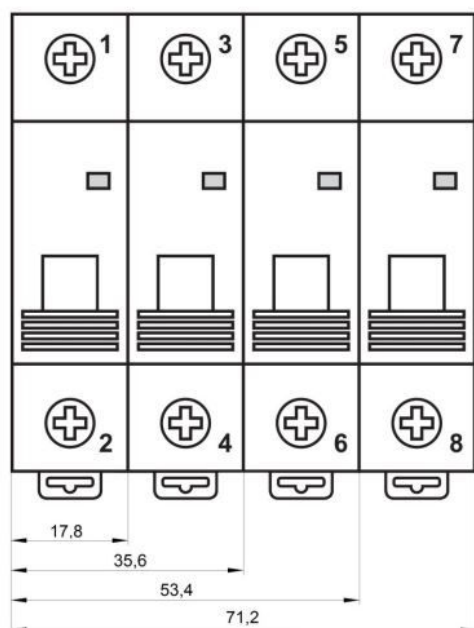
Технические данные - Продолжение

Полюс	3+N
Расчетная мощность короткого замыкания	10 kA (IEC/EN 60898) , 5 kA (UL 1077)
Напряжение пробоя изоляции	6kV
Energy limiting class	3
Test voltage (V)	2000
Pollution degree	2
Потеря мощности (W)	7,60
Internal resistance	20A: 3.832mΩ
Lifetime, electric	4000 Operations
Lifespan, mechanical	20000 Operations
Степень защиты	IP20
Terminal cross section (mm²)	1 - 25
Clamp size for busbar	10 mm²/16 mm²
Материал проводников	Copper
Terminal type	Double function clamp / pin and fork busbar
Calibration-Temperature (°C)	30
Температурный диапазон эксплуатации (°C) (°C)	-25 to +70
Ambient Temperature - nominal Tripping (°C)	-5 to +40
Монтаж	On DIN rail according to EN 60715 (35mm) via quick mounting clip
опциональные принадлежности	AM900099--;BSB90113-A;BSB90114-A;AM900008--;AM900006--;AM900005--
Монтажное положение	any
Certificates	UL 1077, File No. E195102
Сила тока (A)	20

Circuit diagram



Dimensions



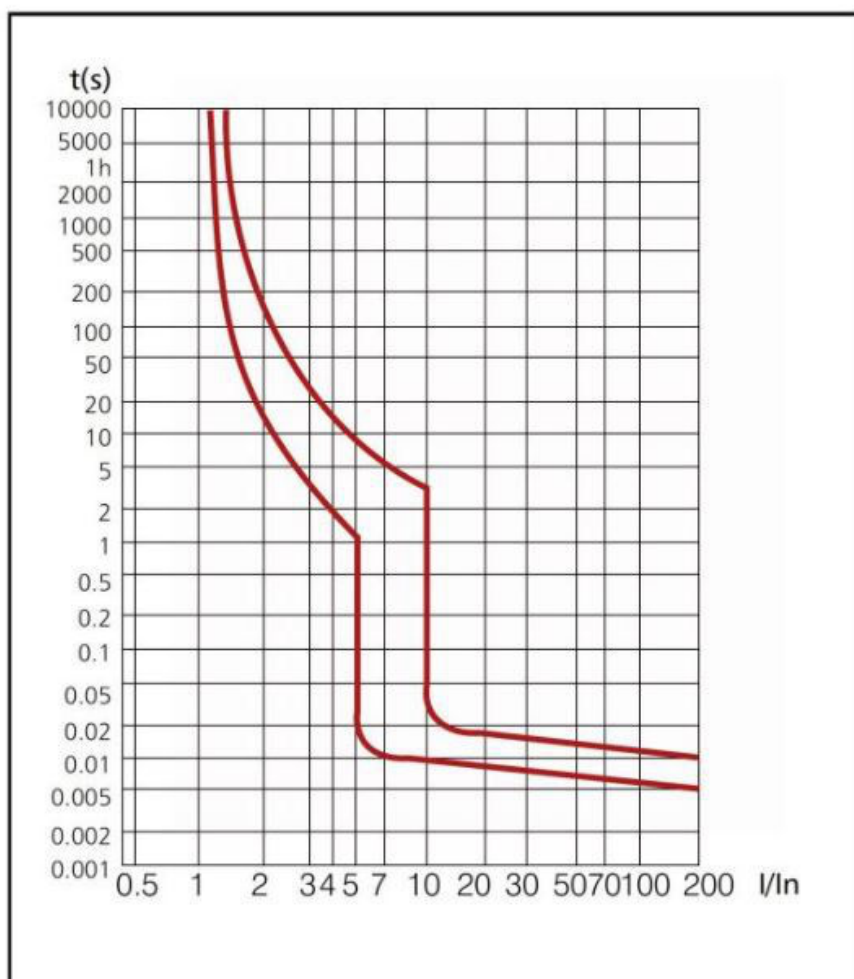
Let-through energy characteristic

I^2t Durchlassenergie/ let-through energy



Tripping characteristic according to IEC 60898

Kennlinie C



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	0.9 kA	2.2 kA	4.5 kA	10.0 kA	10.0 kA	10.0 kA
4A	0.5 kA	0.6 kA	0.8 kA	1.8 kA	3.6 kA	9.7 kA	10.0 kA	10.0 kA
6A	0.5 kA	0.5 kA	0.6 kA	1.4 kA	2.4 kA	5.5 kA	10.0 kA	10.0 kA
10A	-	0.5 kA	0.6 kA	1.3 kA	2.0 kA	3.6 kA	5.4 kA	10.0 kA
13A	-	-	-	1.3 kA	1.9 kA	3.3 kA	5.0 kA	9.4 kA
16A	-	-	-	1.2 kA	1.8 kA	3.2 kA	4.4 kA	8.0 kA
20A	-	-	-	1.2 kA	1.8 kA	3.1 kA	4.1 kA	7.0 kA
25A	-	-	-	-	1.7 kA	2.8 kA	3.8 kA	6.5 kA
32A	-	-	-	-	-	2.7 kA	3.7 kA	6.2 kA
40A	-	-	-	-	-	-	3.5 kA	5.9 kA
50A	-	-	-	-	-	-	-	5.5 kA
63A	-	-	-	-	-	-	-	-

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	0.6 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	0.7 kA	1.8 kA	2.6 kA	4.7 kA	6.6 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
4A	0.5 kA	0.5 kA	0.7 kA	1.5 kA	2.1 kA	3.6 kA	5.0 kA	10.0 kA	10.0 kA	10.0 kA	10.0 kA
6A	0.5 kA	0.5 kA	0.5 kA	1.2 kA	1.5 kA	2.5 kA	3.3 kA	5.7 kA	10.0 kA	10.0 kA	10.0 kA
10A	-	-	0.5 kA	1.0 kA	1.4 kA	2.0 kA	2.5 kA	3.8 kA	8.0 kA	10.0 kA	10.0 kA
13A	-	-	-	1.0 kA	1.3 kA	1.9 kA	2.4 kA	3.6 kA	7.0 kA	10.0 kA	10.0 kA
16A	-	-	-	1.0 kA	1.3 kA	1.8 kA	2.3 kA	3.3 kA	6.0 kA	8.8 kA	10.0 kA
20A	-	-	-	1.0 kA	1.2 kA	1.7 kA	2.2 kA	3.2 kA	5.5 kA	7.7 kA	10.0 kA
25A	-	-	-	-	-	1.6 kA	2.1 kA	3.0 kA	5.2 kA	7.3 kA	10.0 kA
32A	-	-	-	-	-	-	2.1 kA	2.9 kA	5.0 kA	7.0 kA	10.0 kA
40A	-	-	-	-	-	-	-	2.8 kA	4.8 kA	6.7 kA	10.0 kA
50A	-	-	-	-	-	-	-	-	4.5 kA	6.3 kA	9.5 kA
63A	-	-	-	-	-	-	-	-	-	5.9 kA	8.4 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	-	-	-	-	-	-

Таблица артикулов

ОПИСАНИЕ	ВЕС МЕДИ (кг/км)	Номер заказа
Miniature Circuit Breaker AMPARO 5kA, C 20A, 3+N, UL1077 Product category AM10, Neutral on right side, Product standard EN 60898-1, IEC 60898-1, UL1077		AM017820UL
опциональные принадлежности		
Доп. контакт 1НО Тип AM6, Норма EN 60947-5-1:2017		AM900099
Шина гребенчатая, 18 мм, 3-пол. 10 мм ² , 1 м, исполнение без возможности отсоединения	480	BSB90113-A
Шина гребенчатая, 18 мм, 3-пол. 16 мм ² , 1 м, исполнение без возможности отсоединения	670	BSB90114-A
Низковольтный расцепитель 230В пер.т., серия AMPARO, с защелкой IEC/EN 60947-5-1		AM900008
Шунтовой расцепитель 230В/400В пер.т., серия AMPARO, с защелкой IEC/EN 60947-5-1		AM900006
Шунтовой расцепитель 24В пер.т./пост.т., серия AMPARO, с защелкой IEC/EN 60947-5-1		AM900005