

## Datasheet

### ETA 1180 Circuit Breakers and Bases

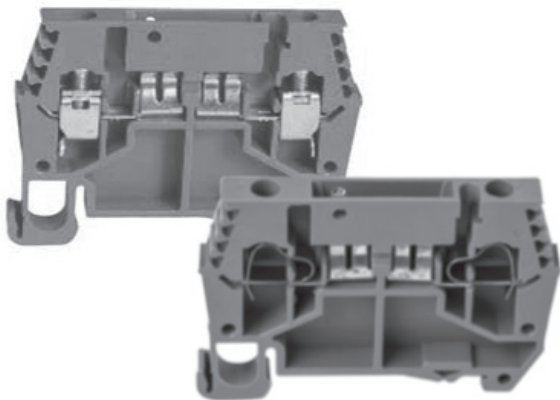
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#### ETA 1180 Circuit Breakers

The Weidmüller thermal circuit breaker type 1180 reduces stoppages and downtime. In combination with a modular style terminal block the circuit breaker offers individual protection for every circuit.

- Push button resettable
- All standard amperages available from 0.1 A to 10.0 A
- cRUus (UL 1077) and CSA (C22.2 No. 235)



#### Terminal Block (Bases)

- Screw type or tension (spring) type terminal options
- Circuit breaker status indication available with LEDs
- Only 6mm wide
- 12 V and 24 V LED versions
- cRUus, CE, RoHS

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## Thermal Overcurrent Circuit Breaker



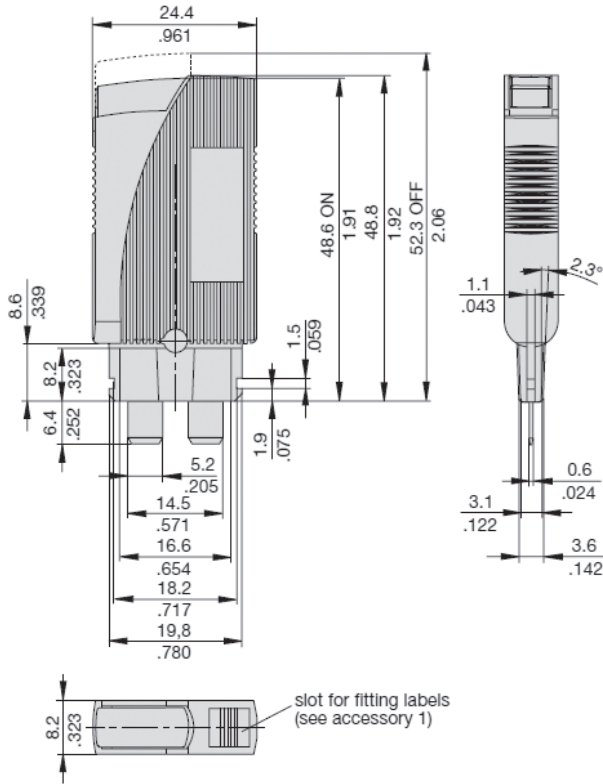
## Technical Data

General Data	
Voltage rating	AC 250 V; DC 65 V
Current ratings	0.1... 10 A
Typical life	6,000 operations at 1 x I <sub>N</sub> (low-inductance) 500 operations at 2 x I <sub>N</sub> (inductive)
Ambient temperature	-20... +60°C (T 60) -4... +140°F
Insulation co-ordination (IEC 60664 and 60664 A)	rated impulse withstand voltage 2.5 kV pollution degree 2
Dielectric strength (IEC 60664 and 60664A)	test voltage operating area AC 3,000V Insulation resistance > 100 MΩ (DC 500V)
Interrupting capacity I <sub>cn</sub>	0.1... 5 A 6 x I <sub>N</sub> AC 250 V DC 65 V
	6... 10 A 8 x I <sub>N</sub> AC 250 V DC 65 V
	0.1... 0.7 A 25 x I <sub>N</sub> DC 30 V
	0.8... 6 A 10 x I <sub>N</sub> DC 30 V
	7... 10 A 20 x I <sub>N</sub> DC 30 V
Interrupting capacity (UL 1077)	AC 250 V 2,000 A
Degree of protection (IEC 60529 / DIN 40050)	operating area IP40
Vibration without terminal block	5 g (57-500 Hz) ± 0.38mm (10-57 Hz) to IEC
Shock without terminal block	25 g (11 ms)
Corrosion	96 hours at 5% salt mist
Humidity	240 hours at 95% RH
Mass	approx. 15 g
Approvals	
Authority	Standard Rated voltage
VDE	IEC/EN 60934 AC 250 V
	DC 65 V
UL file E67320	UL 1077 AC 250 V
	C22.2 No 235 DC 72 V
CSA file 165971	AC 250 V
	DC 72 V
Note	

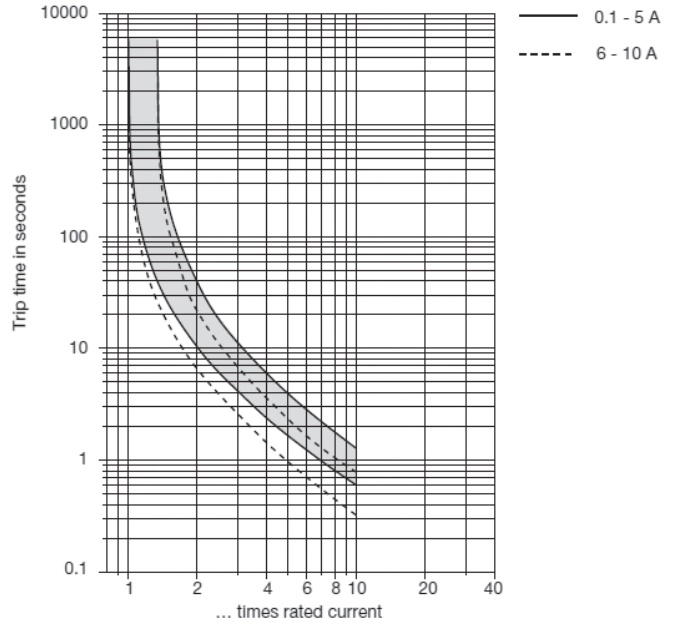
## Ordering Data

Description	Part No.	Description	Part No.	Description	Part No.
ETA 1180 01 0.10A	<b>1278840000</b>	ETA 1180 01 0.70A	<b>1278930000</b>	ETA 1180 01 3.50A	<b>1279010000</b>
ETA 1180 01 0.20A	<b>1278850000</b>	ETA 1180 01 0.80A	<b>1278940000</b>	ETA 1180 01 4.00A	<b>1279020000</b>
ETA 1180 01 0.25A	<b>1278860000</b>	ETA 1180 01 1.00A	<b>1278950000</b>	ETA 1180 01 5.00A	<b>1279030000</b>
ETA 1180 01 0.30A	<b>1278870000</b>	ETA 1180 01 1.50A	<b>1278960000</b>	ETA 1180 01 6.00A	<b>1279040000</b>
ETA 1180 01 0.40A	<b>1278880000</b>	ETA 1180 01 2.00A	<b>1278970000</b>	ETA 1180 01 7.00A	<b>1279050000</b>
ETA 1180 01 0.50A	<b>1278910000</b>	ETA 1180 01 2.50A	<b>1278980000</b>	ETA 1180 01 8.00A	<b>1279060000</b>
ETA 1180 01 0.60A	<b>1278920000</b>	ETA 1180 01 3.00A	<b>1278990000</b>	ETA 1180 01 10.0A	<b>1279070000</b>
Note					

**Dimensions**



**Typical time/current characteristics at +23°C/73.4°F**



The time/current characteristic curve depends on the ambient temperature prevailing. In order to eliminate nuisance tripping, please multiply the circuit breaker current ratings by the derating factor shown below.

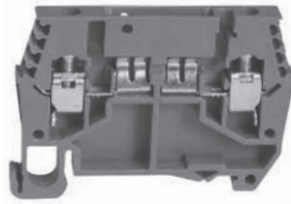
Ambient temperature	°F	-22	-4	+14	+32	+73.4	+104	+122	+140
	°C	-20	-10	0	+23	+40	+50	+60	+60
Derating factor		0.8	0.76	0.84	0.92	1	1.08	1.16	1.24

**Standard current ratings and typical internal resistance values**

Current rating (A)	Internal resistance (Ω)	Current rating (A)	Internal resistance (Ω)
0.1	81	2	0.25
0.2	22	2.5	0.18
0.25	14	3	0.11
0.3	8.7	3.5	0.08
0.4	5.5	4	0.07
0.5	3.4	5	≤ 0.05
0.6	2.5	6	≤ 0.05
0.7	1.7	7	≤ 0.05
0.8	1.5	8	≤ 0.05
1	0.9	10	≤ 0.05
1.5	0.4		

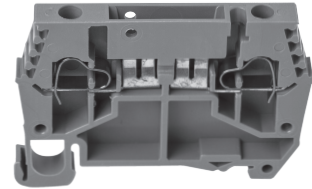
**Screw clamp terminal block**

Flat-type fuse holder terminal block



**Tension clamp terminal block**

Flat-type fuse holder terminal block



**Technical Data**

General Data	
Dimensions W-L-H mm (in.)	6 - 56 - 34 (0.24 - 2.21 - 1.34)
Weight/Piece	9 g
Color	Grey
Technical Data	
Mounting type (EN 60715)	DIN 35mm
Maximum load current	25 A
Insulating material	PA
Self-extinguishing degree acc. to UL94	V0
Pollution degree	3
Surge voltage category	III
Insulating material group	I
Nominal Voltage	300 V
Nominal Current	25 A
Connection Data	
Conductor cross-section solid min/max	0.50 / 4mm <sup>2</sup>
Conductor cross-section stranded min/max	0.50 / 4mm <sup>2</sup>
AWG min/max	24-10AWG
Max conductor cross-section stranded with ferrule with plastic sleeve DIN 46228/4	4mm <sup>2</sup> / L=12mm
Stripping length	max 9mm
Screw	M3
Tightening torque	0.6Nm / 7 Lb-In
<b>Approvals</b>	RoHS, cRUus, CE
<b>Note</b>	

Dimensions W-L-H mm (in.)	6 - 56 - 34 (0.24 - 2.21 - 1.34)
Weight/Piece	9 g
Color	Grey
Mounting type (EN 60715)	DIN 35mm
Maximum load current	25 A
Insulating material	PA
Self-extinguishing degree acc. to UL94	V0
Pollution degree	3
Surge voltage category	III
Insulating material group	I
Nominal Voltage	300 V
Nominal Current	25 A
Conductor cross-section solid min/max	0.50 / 4mm <sup>2</sup>
Conductor cross-section stranded min/max	0.50 / 4mm <sup>2</sup>
AWG min/max	24-10AWG
Max conductor cross-section stranded with ferrule with plastic sleeve DIN 46228/4	4mm <sup>2</sup> / L=12mm
Stripping length	max 9mm
Screw	M3
Tightening torque	0.6Nm / 7 Lb-In
<b>Approvals</b>	RoHS, cRUus, CE
<b>Note</b>	

Dimensions W-L-H mm (in.)	6 - 56 - 34 (0.24 - 2.21 - 1.34)
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Pollution degree	3
Surge voltage category	III
Insulating material group	I
Nominal Voltage	300 V
Nominal Current	25 A
Conductor cross-section solid min/max	0.50 / 4mm <sup>2</sup>
Conductor cross-section stranded min/max	0.50 / 4mm <sup>2</sup>
AWG min/max	24-10AWG (STR) / 24-12AWG (SOL)
Max conductor cross-section stranded with ferrule with plastic sleeve DIN 46228/4	4mm <sup>2</sup> / L=12mm
Stripping length	max 9mm
Screw	
Tightening torque	
<b>Approvals</b>	RoHS, cRUus, CE
<b>Note</b>	

**Ordering Data**

Type	Part No.
Terminal Block	
Accessories	
Marking tags (white) 120 tags per card	
<b>Note</b>	

Type	Part No.
Socket, screw terminal block	<b>6720001186</b>
Socket, screw terminal block with 12 V LED	<b>6720001187</b>
Socket, screw terminal block with 24 V LED	<b>6720001188</b>
end plate, terminal block socket	<b>6720001192</b>
WS 12/6 MC	<b>1609900000</b>

Type	Part No.
Socket, tension terminal block	<b>6720001189</b>
Socket, tension terminal block with 12 V LED	<b>6720001190</b>
Socket, tension terminal block with 24 V LED	<b>6720001191</b>
end plate, terminal block socket	<b>6720001192</b>
WS 12/6 MC	<b>1609900000</b>

