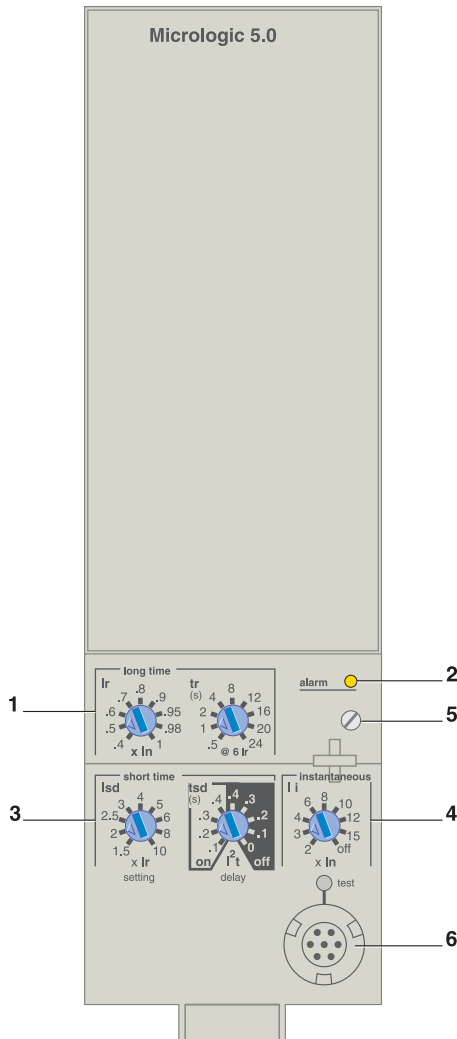


Micrologic 2.0, 5.0 and 6.0 control units protect power circuits. Micrologic 5.0 and 6.0 offers time discrimination for short-circuits as well.

DE128030



- 1 long-time threshold and tripping delay
- 2 overload alarm (LED)
- 3 short-time pick-up and tripping delay
- 4 instantaneous pick-up
- 5 fixing screw for long-time rating plug
- 6 test connector

Protection

Protection thresholds and delays are set using the adjustment dials.

Overload protection

True rms long-time protection.

Thermal memory: thermal image before and after tripping.

Setting accuracy may be enhanced by limiting the setting range using a different long-time rating plug.

Overload protection can be cancelled using a specific LT rating plug "Off".

Short-circuit protection

Short-time (rms) and instantaneous protection.

Selection of I^2t type (ON or OFF) for short-time delay.

Earth-fault protection

Residual or source ground return earth fault protection.

Selection of I^2t type (ON or OFF) for delay.

Neutral protection

On three-pole circuit breakers, neutral protection is not possible.

On four-pole circuit breakers, neutral protection may be set using a three-position switch: neutral unprotected (4P 3d), neutral protection at 0.5 Ir (4P 3d + N/2) or neutral protection at Ir (4P 4d).

Indications

Overload indication by alarm LED on the front; the LED goes on when the current exceeds the long-time trip threshold.

Test

A mini test kit or a portable test kit may be connected to the test connector on the front to check circuit-breaker operation after installing the trip unit or accessories.

Note.

Micrologic control units are equipped with a transparent lead-seal cover as standard.

Protection

Micrologic 2.0

Long time

Current setting (A)	$I_r = I_n \times \dots$		0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.98	1
tripping between 1.05 and 1.20 x I_r			other ranges or disable by changing long-time rating plug								
Time setting		t_r (s)	0.5	1	2	4	8	12	16	20	24
Time delay (s)	accuracy: 0 to -30 %	1.5 x I_r	12.5	25	50	100	200	300	400	500	600
	accuracy: 0 to -20 %	6 x I_r	0.7 ⁽¹⁾	1	2	4	8	12	16	20	24
	accuracy: 0 to -20 %	7.2 x I_r	0.7 ⁽²⁾	0.69	1.38	2.7	5.5	8.3	11	13.8	16.6

Thermal memory 20 minutes before and after tripping

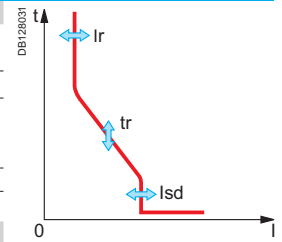
(1) 0 to -40 % - (2) 0 to -60 %

Instantaneous

Pick-up (A) $I_{sd} = I_r \times \dots$ 1.5 2 2.5 3 4 5 6 8 10

accuracy: $\pm 10\%$

Time delay max. resettable time: 20 ms; max break time: 80 ms



Protection

Micrologic 5.0 / 6.0

Long time

Current setting (A)	$I_r = I_n \times \dots$		0.4	0.5	0.6	0.7	0.8	0.9	0.95	0.98	1
tripping between 1.05 and 1.20 x I_r			Other ranges or disable by changing long-time rating plug								
Time setting		t_r (s)	0.5	1	2	4	8	12	16	20	24
Time delay (s)	Accuracy: 0 to -30 %	1.5 x I_r	12.5	25	50	100	200	300	400	500	600
	Accuracy: 0 to -20 %	6 x I_r	0.7 ⁽¹⁾	1	2	4	8	12	16	20	24
	Accuracy: 0 to -20 %	7.2 x I_r	0.7 ⁽²⁾	0.69	1.38	2.7	5.5	8.3	11	13.8	16.6

Thermal memory 20 minutes before and after tripping

(1) 0 to -40 % - (2) 0 to -60 %

Short time

Pick-up (A) $I_{sd} = I_r \times \dots$ 1.5 2 2.5 3 4 5 6 8 10

Accuracy: $\pm 10\%$

Time setting tsd (s)	Settings	I^2t Off	0	0.1	0.2	0.3	0.4
			I^2t On	-	0.1	0.2	0.3

Time delay (ms) at 10 x I_r	Settings	t_{sd} (max resettable time)	20	80	140	230	350
			t_{sd} (max break time)	80	140	200	320

Instantaneous

Pick-up (A) $I_i = I_n \times \dots$ 2 3 4 6 8 10 12 15 off

Accuracy: $\pm 10\%$

Time delay Max resettable time: 20 ms
Max break time: 50 ms

Earth fault

Micrologic 6.0

Pick-up (A)	$I_g = I_n \times \dots$		A	B	C	D	E	F	G	H	J
Accuracy: $\pm 10\%$	$I_n \leq 400$ A	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	
	400 A < I_n < 1250 A	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1	
	$I_n \geq 1250$ A	500	640	720	800	880	960	1040	1120	1200	
Time setting tg (s)	Settings	I^2t Off	0	0.1	0.2	0.3	0.4				
			I^2t On	-	0.1	0.2	0.3	0.4			
Time delay (ms)	Settings	t_g (max resettable time)	20	80	140	230	350				
			t_g (max break time)	80	140	200	320	500			

Note: all current-based protection functions require no auxiliary source.

The test / reset button resets maximeters, clears the tripping indication and tests the battery.

