

dc Current Alarm v2 DCA218

The DCA218 is for monitoring of DC and true RMS AC currents from 5 to 6000A and provides a normally open relay output. Internal coding plugs are used to use to program the measurement range from 10 to 100% of the CT used making the relay trip point easier to set. The dead-band will then be a percentage of the selected range. Current is detected by means of a toroidal Hall Effect sensor, providing total isolation and true waveform transfer. This is particularly useful for low voltage systems, where the traditional DC-Shunt method is not acceptable. To accommodate pulsing current or high harmonic contents the filter constant can be set by coding plugs. The input output and supply are fully isolated. Trip status is indicated by front mounted LED. For external CT version the SET adjustment is accessible from the TOP. For top mounted CT the SET adjustment is on the lower narrow edge.



DCA218 – X X X X X

Power Supply:

4 = 8-60Vdc / 15-42Vac 50/60Hz

*) 5 = 80-300Vdc / 80-280Vac 50/60Hz

Input: (one turn)

*) 1 = 50A (5A steps in selection).

*) 2 = 100A (10A steps in selection).

3 = External CT specify type and calibration.

HCT016 = 0-50A 21mm hole

HCT017 = 0-100A 21mm hole

HCT018 = 0-400A 42mm hole

HCT019 = 800 to 6000A 150 x 40mm

*) 9 = Other (specify).

Relay:

0 = N/O contact

1 = N/C contact

Dead-band:

1 = 5%

4 = 30%

2 = 10%

3 = 20%

*) 9 = Other (specify)

Measurement:

0 = DC current.

*) 1 = True rms AC current.

*) 9 = Other (specify)

*) = Price Extra.

Input Current Range Selection

Full Scale R	JP 2 Selection			
	5	10	15	20
10%	X	-	-	-
20%	-	X	-	-
30%	-	-	X	-
40%	-	-	-	X
50%	X	-	-	X
60%	-	X	-	X
70%	-	-	X	X
80%	X	-	X	X
90%	-	X	X	X
100%	X	X	X	X

For lower input currents use several turns through the toroid.

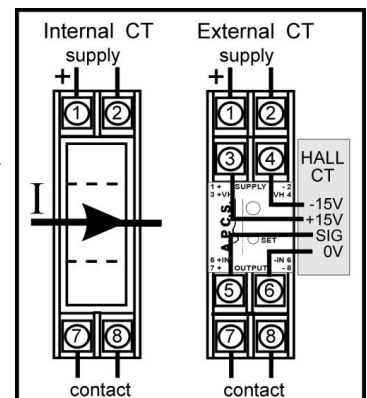
In the interest of development and improvement, APCS reserve the right to amend, without notice, details contained in this publication. APCS will accept no legal liability for any errors, omissions or amendments.

Input Filter Selection (T90)

JP1	A	B
10ms	-	-
250ms	X	-
500ms	-	X
800ms	X	X

External CT

The top mounted CT models have an aperture of 12.5mm x 7mm. The external HALL effect CT can be used with larger conductor sizes and higher currents. Drawings of external CT are available via the CT part number.



Specifications

Size (top CT): 23.5W x 71.5H x 130D (mm)
 Size (external CT): 23.5W x 71.5H x 109D (mm)
 Housing: ABS.
 Mounting: Clip for 35mm DIN-Rail.
 Connection: Screw terminals.
 Weight: 104 gr.
 Response time: See table.
 Input range: See input order code.
 CT Aperture: 12.5mm x 7mm
 Frequency range: DC to 100kHz
 Repeatability: 0.1% of range.
 Relay Contact: 8A/250Vac resistive
 3.5A/250Vac inductive.
 Protection class: IP40 (IP65) optional.
 Operating temperature: 0...+70°C.
 Temperature drift error: < 0.05% per °C.
 Overload continuous: 150% of rated input.
 Short term (2 sec): 5 times rated input.
 Input/output isolation: 3kV rms.
 Power/output isolation: 2kV rms.
 EMC: AS/NZS 4251.1

(EN 50081.1)