



**Electrical
Importing
Company**

NEW

DC FAULTS ON AC CIRCUITS

Standard RCD FAILURE or FALSE TRIPPING

PROTECTION FOR

- Electric Vehicle Charging Systems
- Photovoltaic (solar) Systems
- UPS Systems
- Elevator Controllers
- Cranes of all Kinds
- Variable-Speed Machine Tools
- Rectifiers with Active Power Factor Correction

GEWISS Type B[IR] RCCB



Type A RCCB (RCD) can fail to operate if there is a DC leakage current of only 6mA. Type B RCCB will provide protection and reduce false tripping.

"All final sub circuits supplying EV charging stations must be individually protected by a ... **Type B RCD** ..." – WorkSafe Electric Vehicle Charging Safety Guidelines – to be mandatory in 2018.

GEWISS

Type B RCCB (RCD) are to be used to protect all final sub-circuits supplying Electric Vehicle Supply Equipment (EVSE). WorkSafe has recognised the risk of DC current on the AC circuit and has produced EVSE installation guidelines that show that Type B RCCB must be used.

The Gewiss Type B[IR] RCCB provide:



- ✓ Protection in the event of a continuous fault current (DC) on 1 or 3 phase circuits:
- ✓ Protection against pulsed DC residual fault current (same as standard Type A RCCB):
- ✓ Increased immunity from nuisance tripping.




Gewiss Type B[IR] RCCB has greater resistance to false tripping due to mains disturbances and atmospheric discharges in comparison to standard RCCBs. Immunity level 8/20 μ s is 3000A.

The Gewiss Type B[IR] RCCB can be used on the current MEN (TNC-S) supply, and a future TT supply.

The increasing use of power electronics with earth connection can result in leakage currents with high DC component in both fault and fault-free conditions. As a rule, if the standard Type A RCCB has a DC leakage current of more than 6mA, it cannot be guaranteed to operate correctly. The Type B RCCB will ensure correct detection of DC currents on the AC supply circuit.

RCCB (RCD) Residual Current Circuit Breaker		 Complies with EN 61008 & 62423				
SERIES SD – TYPE B[IR] (impulse resistant)						
 GW95721	Part Number	Description	Sensitivity	Width	Current Rating	
	GW95701	RCCB 2P 230V	30mA	4 modules 72mm	25A	
	GW95706				40A	
	GW95716	RCCB 4P 415V			25A	
	GW95721				40A	
	GW95726				63A	
	GW95731				80A	

Accessory					
	Part Number	Description	Contact Rating	Width	Contacts
	GW96007	Auxiliary Contacts for Open/Closed Position	5A – 230VAC 0.5A – 220VDC	0.5 module	1NO/1NC



Electrical Importing Company Limited
123 Captain Springs Road, Onehunga
PO Box 13-872, Auckland 1643, New Zealand
Phone: (09) 634 2978 Fax: (09) 634 6819
Email: eic@eicnz.com Website: www.eicnz.com