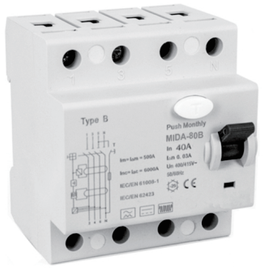
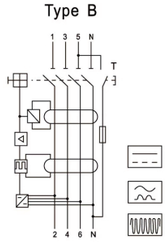
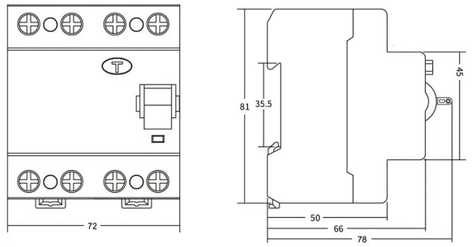
Type B RCD & RCCB

Residual Current Circuit Breaker





Circuit Diagram



Overall and installation dimension (mm)

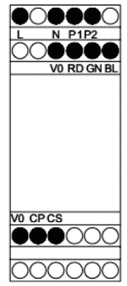
Features

Protection against shock and fire hazards during EV charging requires detection of AC and DC residual fault currents. The Type B EV RCCB has been developed specifically for EV charging systems and can detect AC and DC residual currents in accordance with the requirements of IEC62955. This provides a lower cost option to the Type B RCD, and has been designed specifically for use in Mode 3 and Mode 4 EV charging applications.

Electrical Performance

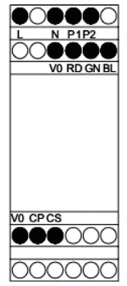
Residual Current Circuit Breaker	Type B RCD / Type B RCCB
Product Model	MIDA-80B
Wave form of the earth leakage sensed	B Type
Rated Current	16A , 25A , 32A , 40A , 63A , 80A , 100A
Poles	2P (1P+N) , 4P (3P+N)
Rated voltage Ue	2Pole: 230V / 240V , 4Pole: 400V / 415V
Insulation Voltage	500V
Rated frequency	50/60Hz
Rated residual operation current(I n)	30 mA, 100 mA ,300 mA
Short-circuit current Inc= I c	10000A
SCPD fuse	10000
Break time under I n	≤0.1s
Dielectric test voltage at ind.Freq. for 1min	2.5kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Protection Degree	IP20
Ambient temperature	-5℃ upto +40℃
Storage temperature	-25℃ upto +70℃
Terminal connection type	Cable/Pin type busbar U-type busbar
Terminal size top/bottom for cable	25mm² 18-3AWG
Terminal size top/bottom for busbar	25mm² 18-3AWG
Tightening torque	2.5Nm 22In-Ibs
Mounting	On DIN rail EN60715(35mm) by means of fast clip device
Connection	From top and bottom
Standard	IEC 61008-1:2010 EN 61008-1:2012 IEC 62423:2009 EN 62423:2012

EVSE Protocol Controller



Cable Version

Cable Version
With RFID



Socket Verison

Socket Verison
With RFID

Features

EVSE Protocol Controller (EPC) is the intelligent part of the vCharge charging stations. It is the communication unit that enables Mode 3 charging in accordance with IEC 61851 and it is available to buy to those building their own EVSE (Electric Vehicle Supply Equipment) or upgrading/replacing parts in other charging stations.

Electrical Performance

Product Name	EVSE Protocol Controller
Maximun Charging Capacity Indication	10A ,16A ,20A,25A,32A (Adjustable)
L	This is where the AC 'live' or 'line connection is made (90-264V @ 50/60Hz AC)
N	This is where the AC 'neutral' connection is made (90-264V @ 50/60 Hz AC)
P1	Relay 1 live from RCCB
P2	Reley 1 live from RCCB
GN	For extemal L ED connection for green indication(5V 30mA)
BL	For external LED connection for blue indication (5V 30mA)
RD	For external L ED connation for red indication (5V 30mA)
VO	This is where the 'ground' connoction is made
CP	This connects to the CP connector on the IEC61851/J1772 EVSE connector
CS	This connects to the PP connector on the IEC61851 EVSE connector
P5	Provides 12V continuously to energise solenoid for hatch lock
P6	This provides 12V 300mA for 500 ms to engage the lock for motorised lock
FB	Reads lock feedback for motorised locks
12V	Power: 12V
FA	Fault
TE	Test
Standard	IEC 62321

Appearance and Installation Size