Resource
Data Management

RDM Current Transformer

User Guide
Revision 1.4

PR0675-150A
PR0675-400A
PR0695-150A
PR0695-400A

Contents

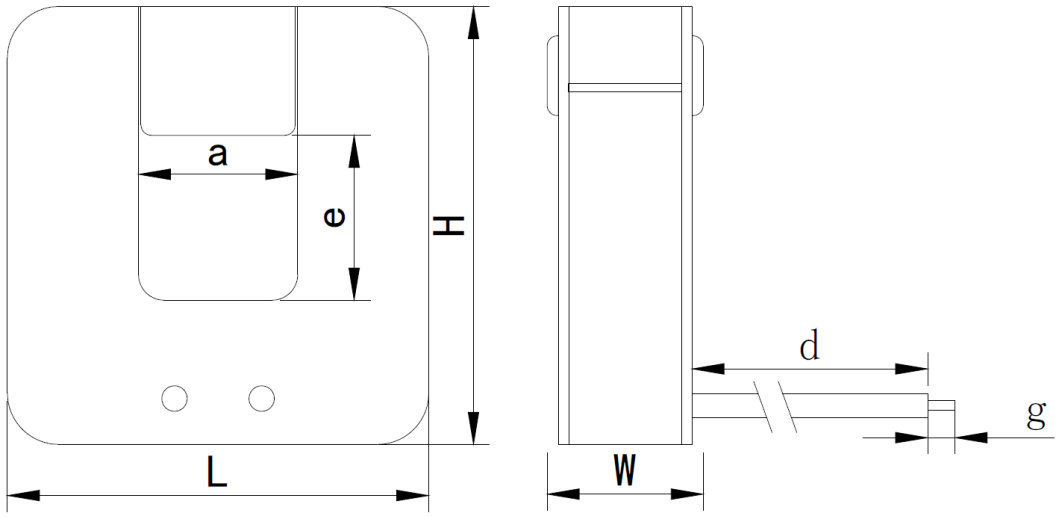
Please ensure all power is switched off before installing or maintaining this product.

Split Core Current Transformer

The RDM range of current transformers is available in two primary current sizes, 150A or 400A, and two secondary output voltage levels, 0.333v (333mv) or 0.1v (100mv).
The PR0675 range has 0.333v secondaries and is for use with the RDM Energy Meter PR0670-3PH-DIN and the RDM 5 Channel USB Current Monitor PR0626v DIN both of which accept 0.333v input signals.
The PR0695 range has 0.1v secondaries and is for use with the RDM Energy Meter PR0690-3PH-DIN only.
The current transformer is a split core type for easy installation onto existing cabling which means it does not require the cable to be disconnected for fitting.

Description	Part Number
Current Transformer, split core, 150A Primary, 0.333v Secondary	PR0675-150A
Current Transformer, split core, 400A Primary, 0.333v Secondary	PR0675-400A
Current Transformer, split core, 150A Primary, 0.1v Secondary	PR0695-150A
Current Transformer, split core, 400A Primary, 0.1v Secondary	PR0695-400A

Dimensions



External Dimensions			Cable Aperture		Secondary Leads	
Length (L)	Width (W)	Height (H)	Length (a)	Height (e)	Length (d)	Stripped End (g)
PR0675/695-150A						
52mm	18mm	54mm	19mm	18mm	1000mm	6mm
PR0675/695-400A						
83mm	26mm	86mm	34mm	34mm	1000mm	6mm

Electrical Connections

Description	RDM Energy Meter (PR0670/690)	RDM USB Current Monitor (PR0626v DIN)
S1 (black wire)	S1+ Terminal	Signal Terminal
S2 (white wire)	S2- Terminal	Common Terminal

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Direction of Current Flow

It is important that the current flowing through the current transformer is in the direct connection. Inside the cable aperture there is an arrow label which shows the direction of current flow.

The cable coming from the supply enters the current transformer from the label side and exits on the opposite side (in the direction of the arrow) and connects to the load that is being measured.

If the current transformer is fitted the wrong way round (the load pointing away from the arrow) then the current reading will still be correct but the power reading will be incorrect.

Specifications

Description	Specification
Primary Current Range	0-150 Amps / 0-400 Amps
Secondary Output (PR0675)	0.0 - 0.333 (333mv) volts AC
Secondary Output (PR0695)	0.0 - 0.1 (100mv) volts AC
Accuracy	+/- 1%
Frequency	50-60Hz
Insulation Level	3 kV
Lead Length	1m
Lead CSA	0.5mm² (20awg)
Operating Temperature	-20°C to +50°C
Storage Temperature	-40°C to +70°C

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.

Revision History

Revision	Date	Changes
1.0	21/09/2017	First Release
1.1	20/08/2019	Image updated to reflect current labelling
1.2	04/02/2022	Dimensions added for 400A CT
1.3	09/12/2022	0.1v secondary range added
1.4	05/05/2026	Wire colours corrected, note and image added on current direction.

Group Offices

RDM Group Head Office

80 Johnstone Avenue
Hillington Industrial Estate
Glasgow
G52 4NZ
United Kingdom

+44 (0)141 810 2828
support@resourcedm.com

RDM USA

9441 Science Center Drive
New Hope
Minneapolis
MN 55403
United States

+1 612 354 3923
usasupport@resourcedm.com

RDM Asia

Sky Park at One City
Jalan USJ 25/1
47650 Subang Jaya
Selangor
Malaysia

+60 3 5022 3188
asiatech@resourcedm.com

Visit www.resourcedm.com/support for more information on RDM solutions, additional product documentation and software downloads.

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