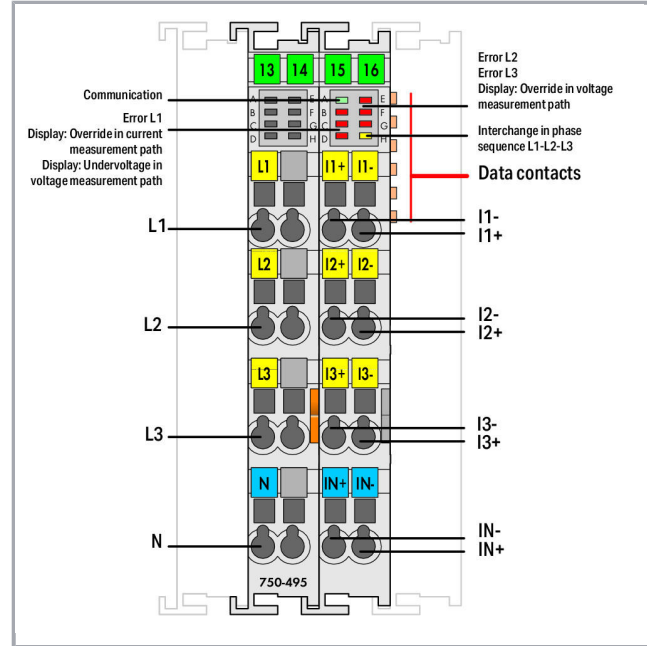


Data sheet | Item number: 750-495/000-002

3-Phase Power Measurement; 690 VAC Rogowski coils; light gray

www.wago.com/750-495/000-002



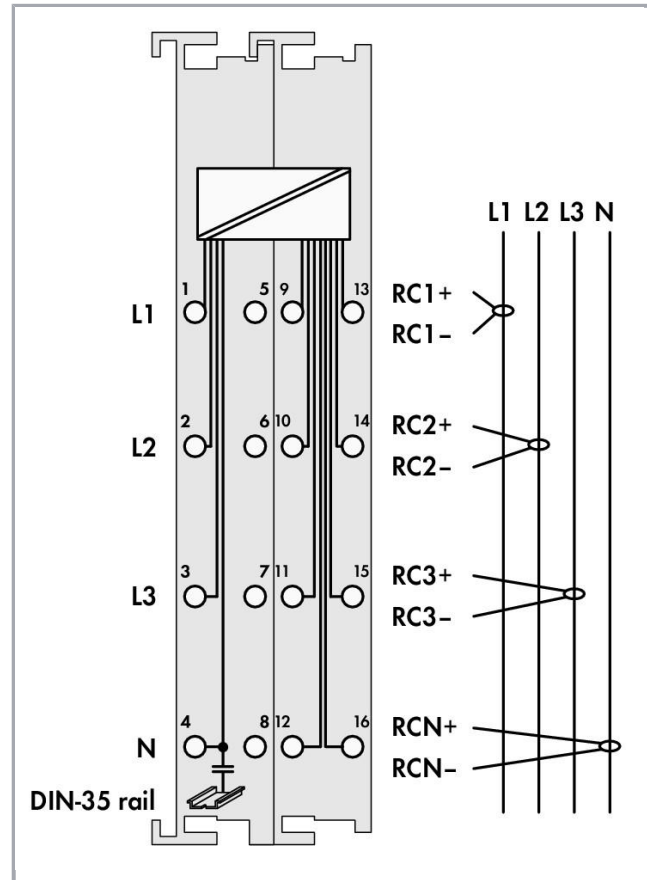
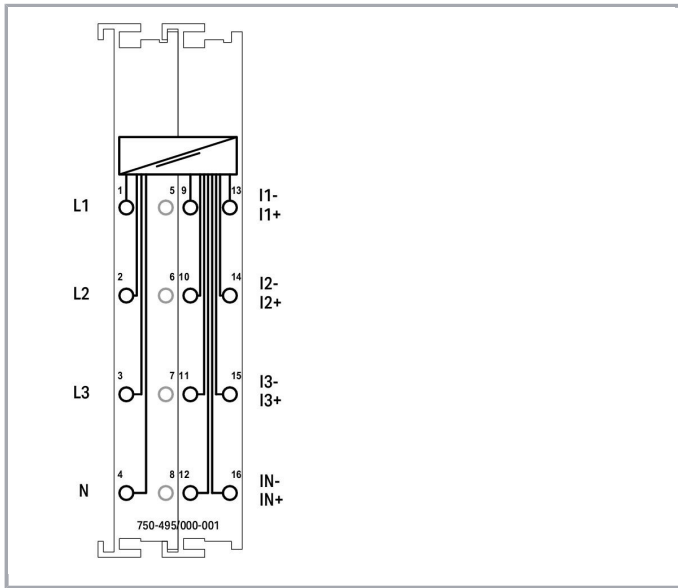
RoHS Compliant

Color:

Subject to changes. Please also observe the further product documentation!

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Item description

The 750-495 3-Phase Power Measurement Module measures electrical data in a three-phase supply network. The voltage is measured via network connection to L1, L2, L3 and N. The current of the three phases is fed to IL1, IL2, IL3 and IN (two clamping points each +,-) via current transformers. The 750-495 Module transmits metrics (e.g., reactive/apparent/effective power, energy consumption, power factor, phase angle, frequency, over-/undervoltage) directly into the process image, without requiring high computing power from the controller. Both comprehensive metrics and harmonic analysis up to the 41st harmonic permit extensive network analysis via the fieldbus. Metrics allow the operator to optimize the supply to a drive or machine, protecting the system from damage and failure. Insulation failures can be detected and prevented via current measurement performed in the neutral conductor. The 4-quadrant display indicates the type of load (inductive, capacitive) and whether it is an energy consumer or producer.

Data

Technical Data

Number of measurement inputs	7 (3 Spannungsmesseingänge, 4 differentielle Strommeseingänge)
Type of signal	Power measurement
Signal form	any periodic signals (in consideration of the threshold frequencies)
Resolution [bit]	24 Bit

Subject to changes. Please also observe the further product documentation!

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Bit width	2 x 128-bit data; 2 x 64-bit control/status
Input resistance voltage path (typ.)	1429 kΩ
Input resistance current path typ.	44 kΩ
Bezug für Messfehler	AC Strom/Spannung
Messfehler, Bezugstemperatur	25 °C
Messfehler, Abweichung max. vom Messbereichsendwert	0.5 %
Measuring current (max.)	Rogowski Coils RT500/RT2000
Measuring cycle time	Adjustable for arithmetic mean value, Min_Max_Values
Frequency range, power supply frequency	45 ... 65 Hz
Frequency range, harmonics analysis	0 ... 3300 Hz
Operating frequency	15.9 kHz
Rated voltage	$V_{LN} = 400 \text{ VAC}$; $V_{LL} = 690 \text{ VAC}$
Measured values	Line-to-line voltage, power output, energy, power factors, mains frequency, harmonic analysis (up to the 41st harmonic), THD
Messkomponenten	Evaluating
Measuring procedure	True RMS measurement
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	100 mA
Isolation	6 kV system/field
Rated surge voltage	6 kV

Connection data

Connection technology: In-/Outputs	16 x CAGE CLAMP®
Connection type (1)	Inputs/Outputs
Solid conductor	0,08 ... 2,5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0,08 ... 2,5 mm ² / 28 ... 14 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

Geometrical Data

Width	24 mm / 0.945 inch
Height	67,8 mm / 2.669 inch
Height from upper-edge of DIN-35 rail	60,6 mm / 2.386 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
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Material Data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Weight	98.1 g
Conformity marking	CE

Environmental Requirements

Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	4g per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible H ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ contaminant concentration at a relative humidity 75 %	25 ppm

Commercial data

Packaging type	BOX
Country of origin	DE
GTIN	4050821841593
Customs Tariff No.	85389099990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP- REM-W43- AIM750



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Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	PRS Polski Rejestr Statków	-	TE/2236 /880590/19
	RINA RINA Germany GmbH	-	ELE066419XG

Counterpart

Compatible products

current transformer

	Item no.: 855-9100/2000-000 Rogowski coil; Primary rated current: 2000 A; Output signal: 40.2 mV; Cable length: 1.5 m	www.wago.com/855-9100/2000-000
	Item no.: 855-9100/500-000 Rogowski coil; Primary rated current: 500 A; Output signal: 10.05 mV; Cable length: 1.5 m	www.wago.com/855-9100/500-000
	Item no.: 855-9150/2000-1251 Rogowski coil; Primary rated current 4000 A; Output signal 22.5 mV per kA; Cable length: 1.5 m; Feedthrough for measurement conductor 125 mm	www.wago.com/855-9150/2000-1251
	Item no.: 855-9150/2000-1751 Rogowski coil; Primary rated current 4000 A; Output signal 22.5 mV per kA; Cable length: 1.5 m; Feedthrough for measurement conductor 175 mm	www.wago.com/855-9150/2000-1751

Subject to changes. Please also observe the further product documentation!



Item no.: 855-9150/2000-701

Rogowski coil; Primary rated current 4000 A; Output signal 22.5 mV per kA; Cable length: 1.5 m; Feedthrough for measurement conductor 70 mm

www.wago.com/855-9150/2000-701



Item no.: 855-9300/2000-000

Rogowski coil; Primary rated current: 2000 A; Output signal: 40.2 mV; Cable length: 3 m

www.wago.com/855-9300/2000-000



Item no.: 855-9300/500-000

Rogowski coil; Primary rated current: 500 A; Output signal: 10.05 mV; Cable length: 3 m

www.wago.com/855-9300/500-000



Item no.: 855-9450/2000-1251

Rogowski coil; Primary rated current 4000 A; Output signal 22.5 mV per kA; Cable length 4.5 m; Feedthrough for measurement conductor 125 mm

www.wago.com/855-9450/2000-1251



Item no.: 855-9450/2000-1751

Rogowski coil; Primary rated current 4000 A; Output signal 22.5 mV per kA; Cable length 4.5 m; Feedthrough for measurement conductor 175 mm

www.wago.com/855-9450/2000-1751

Item no.: 855-9450/2000-701

Rogowski coil; Primary rated current 4000 A; Output signal 22.5 mV per kA; Cable length 4.5 m; Feedthrough for measurement conductor 70 mm

www.wago.com/855-9450/2000-701

system box

Item no.: 850-804

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip

www.wago.com/850-804

Item no.: 850-804/000-001

IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip

www.wago.com/850-804/000-001



Item no.: 850-805

IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip

www.wago.com/850-805

Item no.: 850-814/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

www.wago.com/850-814/002-000

Item no.: 850-815/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

www.wago.com/850-815/002-000



Item no.: 850-816/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

www.wago.com/850-816/002-000



Item no.: 850-817/002-000

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

www.wago.com/850-817/002-000



Item no.: 850-825

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

www.wago.com/850-825

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

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	Item no.: 850-826 IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-826
	Item no.: 850-826/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-826/002-000
	Item no.: 850-827 IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827
	Item no.: 850-827/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-827/002-000
	Item no.: 850-828 IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828
	Item no.: 850-828/002-000 IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	www.wago.com/850-828/002-000
	Item no.: 850-834 IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	www.wago.com/850-834
	Item no.: 850-835 IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	www.wago.com/850-835
	Item no.: 850-836 IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	www.wago.com/850-836
shield connection		
	Item no.: 790-108 Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm	www.wago.com/790-108
	Item no.: 790-116 Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	www.wago.com/790-116
	Item no.: 790-124 Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	www.wago.com/790-124
	Item no.: 790-140 Shield clamping saddle; diameter of compatible conductor	www.wago.com/790-140
	Item no.: 790-208 Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	www.wago.com/790-208
	Item no.: 790-216 Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	www.wago.com/790-216
	Item no.: 790-220 Shield clamping saddle; 30 mm wide; 6 ... 20 mm	www.wago.com/790-220

Subject to changes. Please also observe the further product documentation!














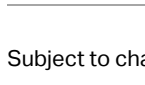
Carrier rail

	Item no.: 210-112 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm	www.wago.com/210-112
	Item no.: 210-113 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-113
	Item no.: 210-114 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715	www.wago.com/210-114
	Item no.: 210-115 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm	www.wago.com/210-115
	Item no.: 210-118 Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715	www.wago.com/210-118
	Item no.: 210-196 Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	www.wago.com/210-196
	Item no.: 210-197 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715	www.wago.com/210-197
	Item no.: 210-198 Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored	www.wago.com/210-198
	Item no.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	www.wago.com/210-504
	Item no.: 210-505 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715	www.wago.com/210-505
	Item no.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715	www.wago.com/210-506
	Item no.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715	www.wago.com/210-508

Marking accessories

	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-002	www.wago.com/2009-145/000-002
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red /000-005	www.wago.com/2009-145/000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue /000-006	www.wago.com/2009-145/000-006

Subject to changes. Please also observe the further product documentation!

	<p>Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-007</p>	<p>www.wago.com/2009-145/000-007</p>
	<p>Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange</p>	<p>www.wago.com/2009-145/000-012</p>
	<p>Item no.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green</p>	<p>www.wago.com/2009-145/000-023</p>
	<p>Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet</p>	<p>www.wago.com/2009-145/000-024</p>
	<p>Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card</p>	<p>www.wago.com/248-501</p>
	<p>Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow</p>	<p>www.wago.com/248-501/000-002</p>
	<p>Item no.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red</p>	<p>www.wago.com/248-501/000-005</p>
	<p>Item no.: 248-501/000-006 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue</p>	<p>www.wago.com/248-501/000-006</p>
	<p>Item no.: 248-501/000-007 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray</p>	<p>www.wago.com/248-501/000-007</p>
	<p>Item no.: 248-501/000-012 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange</p>	<p>www.wago.com/248-501/000-012</p>
	<p>Item no.: 248-501/000-017 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green</p>	<p>www.wago.com/248-501/000-017</p>
	<p>Item no.: 248-501/000-023 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green</p>	<p>www.wago.com/248-501/000-023</p>
	<p>Item no.: 248-501/000-024 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet</p>	<p>www.wago.com/248-501/000-024</p>
	<p>Item no.: 750-103 Group marker carrier; transparent</p>	<p>www.wago.com/750-103</p>

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Item no.: 750-107

Group marker carrier; transparent

www.wago.com/750-107**General accessories**

Item no.: 2007-8874

Compact terminal block; for current and voltage transformers; 6,00 mm²; multicolouredwww.wago.com/2007-8874

Item no.: 2007-8877

Compact terminal block; for current transformer circuit; 6,00 mm²; multicolouredwww.wago.com/2007-8877

Item no.: 855-8001

Power tap; with fuse; 2,5 mm² (12 AWG) - 6 mm² (10 AWG); Phasewww.wago.com/855-8001

Item no.: 855-8002

Power tap; without fuse; 2,5 mm² (12 AWG) - 6 mm² (10 AWG); N-conductorwww.wago.com/855-8002

Item no.: 855-8003

Power tap; with fuse; 10 mm² (8 AWG) - 16 mm² (6 AWG); Phasewww.wago.com/855-8003

Item no.: 855-8004

Power tap; without fuse; 10 mm² (8 AWG) - 16 mm² (6 AWG); N-conductorwww.wago.com/855-8004**Downloads****Documentation****Manual**

3-Phase Power Measurement Module 690 V	V 1.2.0	pdf 19.2 MB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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System Description

Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
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750/753 Series I/O-System – General Product Information		pdf 1.7 MB	Download
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Libraries**Library**

Function block description PowerMeasurement_495_02.lib	2.1.0	zip	Download
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CAD/CAE-Data

CAD data

2D/3D Models 750-495/000-002

[URL](#)

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CAE data

EPLAN Data Portal 750-495/000-002

[URL](#)

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WSCAD Universe 750-495/000-002

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Installation Notes

Product family

750/753 Series – I/O System

[Show all products from the family](#)

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