Paladin Advantage Transducers Class 0.2

An extensive range of higher specification transducers offering Class 0.2 measurement of up to eight electrical parameters. This flexible design provides up to 3 analog outputs in one housing, and a digital version RS232 via a fibre optic cable output for trouble free operation in electrically noisy environments. The range offers EMC withstand, protection against high voltage and overload, and resistance to vibration in harsh electrical environments.

Features

Extensive range

High accuracy 0.2%

True RMS or average sensing measurement

Multiple outputs in one housing

Exceptional waveform handling on distorted waveforms

Zero and span adjustments

DIN rail mounting

Single and 3 phase systems

Vibration and shock resistant

Flame retardant cases

Screw clamp terminals

Benefits

Cost saving remote metering

Reduction of signal levels for ease of metering

Isolated output for safety

Protection against high voltage and overload

Applications

Switchgear

Distribution systems

Generator sets

Control panels

Energy management

Building management

Utility power monitoring

Process control

Motor control

Approvals

Vibration, shock and safety approvals

High Accuracy

Accuracy class 0.2 on analog output. Typically 0.15% with RS232 output.

Interference Elimination

Fibre optic cable RS232 output eliminates ground loop and radio frequency interference problems. The fibre optic cable can be run near a.c. power cables without the risk of data corruption.

High Speed Precision Measurement

Each cycle of the mains waveform is sampled 32 times in the power transducers.

Unique Flexibility

A combination of parameters can be measured. Multiple outputs from a single housing, which can be scaled to individual customer requirements, including dual slope.

True Power Factor

Advanced design provides true power factor (W/VA) output.

Operating Condition Indication

Green LED status indication shows the operating condition.

Frequency Range Control

Out-of-range filter on the frequency transducer helps eliminate invalid signals and need for additional protection circuits.

Approvals

Designed to comply with	
Function:	EN60688, IEC688:1992, EMC and LVD
Vibration/Shock:	IEC 68
Safety:	EN61010, IEC 1010-1 (installation category III, Pollution degree 2, 300V rms)
Enclosure:	IEC529 (IP50)
Fixing:	35mm DIN rail to EN50022 or via optional fixing feet
National Specification:	Indicated by 7th letter of part number

Paladin Advantage Transducers Class 0.2

Specification

	Current	Voltage	Frequency	Current, Volts Frequency	Watts	Vars	VA	Power Factor	Phase Angle
Model / **SPEC**	252-XAA 252-XAR 252-XAS 252-XAL	252-XVA, 252-XVR 252-XVS, 252-XVZ 252-XVL	252-XH	256-XAR, 256-XAS 256-XLK, 256-XVR 256-XVS, 256-XVW 256-XVX, 256-XVY 256-XVZ	256-XW Series	256-XX Series	256-XY Series	256-XF Series	256-XP Series
Prefered inputs:	1A, 5A	110, 120, 208, 220 230, 240, 277, 380 400, 415, 480V	57.7, 110, 120, 220 230, 240, 380, 400 415V	1A, 5A 110, 120, 220, 230, 240, 277, 380, 400, 415, 480V					
Other Inputs	0.2A to 10A	63.5, 69.3, 100 115, 127, 173 190,200,440V	63.5, 100, 127 208, 277, 440, 480V	0.2A to 10A 57.7, 63.5, 69.3, 100, 115, 127, 173, 190, 200, 440V					
Overload Maximum Input:	2 x in continuous 50 x in for 1 second	1.5Vn continuous 2 x Vn for 1 second Maximum terminal voltage 600V	1.5Vn continuous 2 x Vn for 1 second Maximum terminal voltage 600V	3 x in continuous, 20 x in, 5 x 1 second with 5 minute intervals 1.2 x Vn continuous. Maximum terminal voltage 600V 2 x Vn continuous for 10 seconds with 10 second intervals Maximum terminal voltage 600V					
Frequency:	50 or 60Hz +/=10%		50 or 60 Hz	40 to 65Hz					
Ranges:	45/55, 54/66Hz		45/55, 55/65, 45/65 47/63, 48/52 360/440Hz	45/55, 55/65, 45-65Hz 47/53, 57/63Hz				.5/1/.5 .2/1/.8 -1/0/1/0/-1	60/0/60° 30/0/70° -180/0/180°
Burden at normal:	<0.2VA for 252-XAS XAA = 1VA <1.5VA for 252-XVA <0.25VA for 252-XAR/XVR <4.0VA for 252-XVZ		<1VA for 252-XHL/XHS <3VA for 252-XHA	Less than 0.02VA Voltage Less than 0.2VA current					
Accuracy:	Class 0.2		+/=0.05% of mid freq	.02% of mid freq. 256/XLK 0.04% for 45/65Hz	Class 0.2 Usage group III ≤1° RS 232 accuracy typically 0.15%				
Temperature:	Operating -10 to 60°C (normal range of use) Storage -55° to 85°C Calibrated at 23°C			Operating -10° to 60°C (normal range of use) Ref range 0 to 50°C Storage -20 to 70°C Calibrated at 23°C					
Temp. Coefficient:	+/-0.01%/°C		+/-0.01% of mid freq/°C	+/-0.008%/°C					
Humidity:	Less than 95%RH								
Ripple:	0.4% P/P		<0.5% rms	0.4% P/P					
Response time:	Less than 200ms to 99%		Less than 400ms to 95%	Less than 200ms to 99%					
Zero & span:	+/-2% (255-XAA/XVA/XAS/XHA/XHS/XVS have no zero adjustment)			+/-2% typical adjustment					
Isolation:	4kV ms I/P/O/P/AUX/CASE								
Auxiliary Supply:	Not required on model 252-XAA/XVA/XHA D.C. auxiliary 12, 24, 48, 110 & 125V d.c. For all other models select from A.C. voltage input range above.***			Select from A.C. voltage input range above*** D.C. auxiliary 12, 24, 48, 110, 120, 135V***					
Range:	+/-20% of nominal. Maximum d.c. terminal voltage 150V			+/-20% of nominal. Maximum d.c. terminal voltage 156V					
Burden:	Less than 3VA			Less than 6VA					
Preferred Nominal Outputs:	0-1mA into load of 0 to 15kR 0-20mA into load of 0 to 750R 4-20mA into load of 0 to 750R (not available on models 252-XVA/XAA/XHA)			Single or bi-directional output 256-XF XW 0-1mA into load of 0 to 15kR Uni-directional only 0-20mA into load of 0 to 750R 4-20mA into load of 0 to 750R 4-12-20mA into load of 750R					
Other Outputs:	0-5mA into load of 0 to 3kR 0-10mA into load of 0 to 1.5kR 0-10-20mA into load of 0 to 750R 252-XVZ 0-0.5-1mA into load of 0 to 15kR only 0-5V across 250R minimum XAR, XVR, XVZ 0-10V across 500R minimum XAR, XVR, XVZ 1-5V across 250R minimum XAR, XVR 2-10V across 250R minimum XAR, XVR			Dual Slope 0.1V across 50R minimum 0-5V across 250R minimum 0-10V across 500R minimum 1-5V across 250R minimum 2-10V across 500R minimum 0-5mA into load of 0 to 3kR 0-10mA into load of 0 to 1.5kR					
Over-range:	Maximum output is less than 2 x nominal output.			Maximum output is less than 1.3 x nominal output					
Compliance:	15V (Current outputs) 20mA (Voltage outputs)			15V (current outputs) 20mA (Voltage outputs)					
Maximum:	Less than 24V			Less than 24V					
RS232	Use fibre optic adaptor 252-TCA class 0.5% accuracy			Protocols see publication DWT1540/2 Fibre optic-cable socket option					

Stability one year. For dimensions see page 33. For connection diagrams see pages 34-41.

NOTE: ***For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%

Paladin Advantage Transducers Class 0.2

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

A.C. Current Average Sensing - Self Powered

For use in all current measuring applications, calibrated to indicate the true RMS value of a sine wave with less than 1% of 3rd harmonic distortion. Self powered version will allow measurements down to 20% of full input, no auxiliary power required, input and output isolated.

Specification

Inputs:	1, 5 or 10A A.C., 50 or 60Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA
Auxiliary Power:	Self powered

Product Code – Single Phase, Current Transducer, Self Powered, 1 D.C. Output

Input A.C.	Aux Power	O/P D.C.	Catalog No.	Connection Diag.
5A 60Hz	Self	0/1mA	252-XAA*-LSFA-C6	1

A.C. Current Average Sensing - Auxiliary Powered

Auxiliary supply version allows measurement of input currents down to zero, providing a measuring range 0-100% or normal. Calibrated to indicate the true RMS value of a sinewave with up to 1% distortion. Live zero output available. Input, output and auxiliary are isolated.

Specification

Inputs:	1, 5 or 10A A.C., 50 or 60Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C.: 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440 and 480V D.C.: 12, 24, 48, 110, 125V

Product Codes – Single Phase, Current Transducer, Auxiliary Powered, 1 D.C. Output

Input A.C.	A.C. Aux Power	O/P D.C.	Catalog No.	Connection Diag.
5A 60Hz	120V	0/1mA	252-XAS*-LSFA-C6-PQ	6
5A 60Hz	120V	4/20mA	252-XAL*-LSHG-C6-PQ	6

Product Codes – 3 Phase, Current Transducers, Auxiliary Powered, 3 D.C. Outputs

Input A.C.	A.C. Aux Power	O/P D.C.	Catalog No.	Connection Diag.
5A 60Hz	120V	0/1mA	256-XAS*-LSFA-C6-PQ	2
5A 60Hz	120V	4/20mA	256-XAS*-LSHG-C6-PQ	2

With multiple analog outputs, do not common the -ve terminals.

A.C. Current True RMS Sensing - Auxiliary Powered

Used for measuring non standard and distorted waveforms. Measures true RMS value input current. Calibration is maintained for sine waves having up to 50% of 3rd harmonic distortion. Even spring triggered current waveforms at any firing angle will typically be accurate to 0.3%. Isolation is provided between input, output and auxiliary.

Specification

Inputs:	1.5 or 10A A.C. Refer to factory for other inputs
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C. 12, 24, 48, 110, 120, or 135V

Product Code – Single Phase, Current Transducer, Auxiliary Powered, 1 D.C. Output

Input A.C.	A.C. Aux Power	O/P D.C.	Catalog No.	Connection Diag.
5A 60Hz	120V	0/1mA	252-XAR*-LSFA-C6-PQ	6

Product Code – 3 Phase, Current Transducer, Auxiliary Powered, 3 D.C. Outputs

Input A.C.	A.C. Aux Power	O/P D.C.	Catalog No.	Connection Diag.
5A 60Hz	120V	0/1mA	256-XAR*-LSFA-C6-PQ	2

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

A.C. Voltage Average Sensing-Self Powered

Standard version for use in all voltage measuring applications, allowing measurement down to 20% of full input. Average sensing for normal sinewave voltages and RMS calibrated for sinewave with up to 1% of 3rd harmonic distortion. No auxiliary required. Input and output isolated.

Specification

Inputs:	63.5, 100, 110, 115, 120, 139, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V A.C. 50 or 60Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA.
Range:	20 to 125%
Auxiliary Power:	Self powered

Product Code – Single Phase, Voltage Transducer, Self Powered, 1 D.C. Output

Input A.C.	A.C. Aux power	O/P D.C.	Catalog No.	Connection Diag.
120V 60Hz	Self	0/1mA	252-XVA*-PQFA-C6	10

A.C. Voltage Average Sensing - Auxiliary Powered

Auxiliary power allows measurement of voltages down to zero, providing a measurement range of 0-100% or nominal. Average sensing and calibrated to indicate the true RMS value of a sinewave with up to 1% distortion. Live zero output available. Input, Output and Aux are isolated.

Specification

Inputs:	63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440 and 480V a.c., 50 or 60Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C. 12, 24, 48, 110, 120, or 135V

Product Codes – Single Phase, Voltage Transducer, Auxiliary Powered, 1 D.C. Output

Input A.C.	A.C. Aux Power	O/P D.C.	Catalog No.	Connection Diag.
120, 60Hz	120V	0/1mA	252-XVS*-PQFA-C6-PQ	15
120, 60Hz	120V	4/20mA	252-XVL*-PQHG-C6-PQ	15

Product Codes – 3 Phase, 3 Wire, Voltage Transducer, Auxiliary Powered, 3 D.C. Outputs

120	120V	0/1mA	256-XVW*-PQFA-C6-PQ	11
120	120V	4/20mA	256-XVW*-PQHG-C6-PQ	11

Product Code – 3 Phase, 4 Wire, Voltage Transducer, Auxiliary Powered, 3 D.C. Outputs

120, 60Hz	120V	0/1mA	256-XVS*-PQFA-C6-PQ	16

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

A.C. Voltage True RMS-Auxiliary Powered

Can be used for measuring true RMS voltages of non standard and distorted waveforms. Calibration is correct for sine waves having up to 50% of 3rd harmonic distortion, even hybrid triggered current waveforms at any firing angle will typically be accurate to 0.3%. Isolation is provided between input and output.

Specification

Inputs:	63.5, 100, 110, 115, 120, 150, 200, 208, 220, 230, 240, 380, 400, 415, 440 and 480V a.c., 50 or 60Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C. 12, 24, 48, 110, 125V

Product Codes – Single Phase, Voltage Transducer, Auxiliary Powered, 1 D.C. Output

Input A.C.	A.C. Aux Power	O/P D.C.	Catalog No.	Connection Diag.
120, 60Hz	120V	0/1mA	252-XVR*-PQFA-C6-PQ	15
120, 60Hz	120V	4/20mA	252-XVR*-PQHG-C6-PQ	15

Product Codes – 3 Phase, 3 Wire, Voltage Transducer, Auxiliary Powered, 3 D.C. Outputs

120, 60Hz	120V	0/1mA	256-XVY*-PQFA-C6-PQ	11
120, 60Hz	120V	4/20mA	256-XVY*-PQHG-C6-PQ	11

Product Codes – 3 Phase, 4 Wire, Voltage Transducer, Auxiliary Powered, 3 D.C. Outputs

120, 60Hz	120V	0/1mA	256-XVR*-PQFA-C6-PQ	16
120, 60Hz	120V	4/20mA	256-XVR*-PQHG-C6-PQ	16

With multiple analog outputs, do not common the -ve terminals.

A.C. Voltage with Suppressed Zero or Expanded Scale

Single or Three phase models allowing display of small changes within a large voltage. The indicated bandwidth can be 10-30% either side of nominal. The output is directly proportional to the input within a specified span, providing very high accuracy and stability.

Specification

Input Range:	+/- 10% or +/- 30% 0f nominal 100, 120, 220, 240, 380V a.c.
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA.
Auxiliary Power:	Self Powered (252), Aux. Powered (256)

Product Code – Single Phase, Expanded Scale A.C. Voltage Transducer, Self Powered, 1 D.C. Output

Input A.C.	O/P D.C.	Catalog No.	Connection Diag.
110/130V	0/1mA	252-XVZ*-A9FA-C6	15

Product Code – 3 Phase, 3 Wire, Expanded Scale A.C. Voltage Transducer, Auxiliary Powered, RMS Sensing and Calibration, 3 D.C. Outputs

Input A.C.	O/P D.C.	Catalog No.	Connection Diag.
110/130V	0/1mA	256-XVX*-A9FA-C6-PQ	16

Product Code – 3 Phase, 4 Wire, Expanded Scale A.C. Voltage Transducer, Auxiliary Powered, 3 D.C. Outputs

Input A.C.	O/P D.C.	Catalog No.	Connection Diag.
110/130V	0/1mA	256-XVZ*-A9FA-C6-PQ	16

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Frequency

A simple and reliable transducer for measuring supply frequencies of mains and gensets. The output is directly proportional to the input frequency providing very high accuracy and stability. Isolation is provided between input and output.

Specification

Inputs Preferred:	57.7, 63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V
Frequency:	45-55Hz, 55-65Hz, 45-65Hz
Auxiliary Power:	Self powered 252 x XHA, Aux. Powered 252-XL & XHS
Accuracy:	0.05 of mid frequency

Product Codes – Single Frequency Transducer, 1 D.C. Output, Self Powered

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V	45/55	0/1mA	252-XHA*-PQ-FA-AG	10
120V	55/65	0/1mA	252-XHA*-PQ-FA-AN	10
120V	45/65	0/1mA	252-XHA*-PQ-FA-AJ	10
120V	360/440	0/1mA	252-XHA*-PQ-FA-BI	10

Product Codes – Single Frequency Transducer, 1 D.C. Output, Auxiliary Powered

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V	45/55	4/20mA	252-XHL*-PQ-HG-AG-PQ	15
120V	55/65	4/20mA	252-XHL*-PQ-HG-AN-PQ	15
120V	45/65	4/20mA	252-XHL*-PQ-HG-AJ-PQ	15
120V	360/440	4/20mA	252-XHL*-PQ-HG-BI-PQ	15
120V	45/55	0/1mA	252-XHS*-PQ-FA-AG-PQ	15
120V	55/65	0/1mA	252-XHS*-PQ-FA-AN-PQ	15
120V	45/65	0/1mA	252-XHS*-PQ-FA-AJ-PQ	15
120V	360/440	0/1mA	252-XHS*-PQ-FA-BI-PQ	15

Paladin Advantage Transducers Class 0.2

3 in 1 Voltage, Current and Frequency

A 3 in 1 voltage, current and frequency true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Auxiliary Powered, 3 D.C. Outputs

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	55/65	0/1mA	256-XLK*-PQLS-AN-FA-DG	9

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Watt Transducers

A true RMS measurement Watt transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4-20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 1 D.C. output

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XWK*-QQFA-C3**	14

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 1 D.C. Output

120V L-N, 5A	40-65 Hz	0/1mA	256-XWW*-QQFA-C3**	21

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 1 D.C. Output

120V L-L, 5A	40-65 Hz	0/1mA	256-XWM*-QQFA-C3**	20

Product Code – 3 phase, 4 wire balanced load, 1 element, 1 D.C. Output

120V L-N, 5A	40-65 Hz	0/1mA	256-XWH*-QQFA-C3**	24

Product Code – 3 phase, 3 wire balanced load, 1 element, 1 D.C. Output

120V L-L, 5A	40-65 Hz	0/1mA	256-XWL*-QQFA-C3**	41

Paladin Advantage Transducers Class 0.2

VAr Transducers

A true RMS measurement VAr transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 1 D.C. Output

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XXK*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XXW*-QQFA-C3-**	21

Product Code – 3 phase, 3 wire balanced load, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XXL*-QQFA-C3-**	19

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XXM*-QQFA-C3-**	20

Product Code – 3 phase, 4 wire balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XXH*-QQFA-C3-**	24

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

VA Transducer

A true RMS measurement VA transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Codes – Single phase, 2 wire 1 element, 1 D.C. Output

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XYK*-QQFA-C3-**	14
240V, 10A	40-65Hz	0/1mA	256-XYK*-Q8FA-C3-**	14

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XYW*-QQFA-C3-**	21

Product Code – 3 phase, 3 wire balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XYL*-QQFA-C3-**	19

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XYM*-QQFA-C3-**	20

Product Code – 3 phase, 4 wire balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65 Hz	0/1mA	256-XYH*-QQFA-C3-**	24

Watt and VAr Transducers

A Watt and VAr true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V a.c. D.C.: 12, 24, 48, 110, 120 or 135V D.C.

Product Code – Single phase, 2 wire 1 element, 2 D.C. Outputs

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XDK*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 2 D.C. Outputs

120V L-N, 5A	40-65Hz	0/1mA	256-XDW*-QQFA-C3-**	23

Product Code – 3 phase, 4 wire balanced load, 1 element, 2 D.C. Outputs

120V L-N, 5A	40-65Hz	0/1mA	256-XDH*-QQFA-C3-**	26

Product Code – 3 phase, 3 wire balanced load, 1 element, 2 D.C. Outputs

120V L-L, 5A	40-65Hz	0/1mA	256-XDL*-QQFA-C3-**	25

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 2 D.C. Outputs

120V L-L, 5A	40-65Hz	0/1mA	256-XDM*-QQFA-C3-**	22

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Watt, VAr & VA

A Watt, VAr & VA true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 3 D.C. Outputs

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XEK*-QQFA-C3-**	14

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 3 D.C. Outputs

120V L-L, 5A	40-65Hz	0/1mA	256-XRM*-QQFA-C3-**	31

Product Code – 3 phase, 3 wire balanced load 1 element, 3 D.C. Outputs

120V L-L, 5A	40-65Hz	0/1mA	256-XRL*-QQFA-C3-**	27

Product Code – 3 phase, 4 wire balanced load 1 element, 3 D.C. Outputs

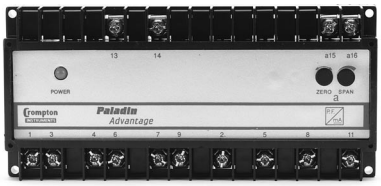
120V L-N, 5A	40-65Hz	0/1mA	256-XRH*-QQFA-C3-**	28

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 3 D.C. Outputs

120V L-N, 5A	40-65Hz	0/1mA	256-XRW*-QQFA-C3-**	32

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com



Power Factor – 2 Quadrant

A Power Factor – 2 Quadrant true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4-20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 1 D.C. Output

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XFS*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire, balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFV*--QQFA-C3-**	24

Product Code – 3 phase, 3 wire, balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFW*--QQFA-C3-**	19

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFU*-QQFA-C3-**	20

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFT*-QQFA-C3-**	21

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Power Factor – 4 Quadrant

A Power Factor – 4 Quadrant true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4-20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 1 D.C. Output

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XFA*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire, balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFD*-QQFA-C3-**	24

Product Code – 3 phase, 3 wire, balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFG*-QQFA-C3-**	19

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFC*-QQFA-C3-**	20

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XFB*-QQFA-C3-**	21

Phase Angle Transducer – 2 Quadrant

A true RMS measurement Phase Angle – 2 Quadrant transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0-1, 0-5, 0-10, 0-20, 4-20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 1 D.C. Output

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XPS*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire unbalanced load, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XPT*-QQFA-C3-**	21

Product Code – 3 phase, 4 wire, balanced load, 3 elements, 1 D.C. Output

120V, F5A	40-65Hz	0/1mA	256-XPV*-QQFA-C3-**	24

Product Code – 3 phase, 3 wire, balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XPW*-QQFA-C3-**	19

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XPU*-QQFA-C3-**	20

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Phase Angle Transducer – 4 Quadrant

A true RMS measurement Phase Angle – 4 Quadrant transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0-1, 0-5, 0-10, 0-20, 4-20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – Single phase, 2 wire 1 element, 2 D.C. Outputs

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XPA*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XPB*-QQFA-C3-**	21

Product Code – 3 phase, 4 wire, balanced load, 1 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XPD*-QQFA-C3-**	24

Product Code – 3 phase, 3 wire, balanced load, 1 element, 1 D.C. Output

120V, 5A	40-65Hz	0/1mA	256-XPG*-QQFA-C3-**	19

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XPC*-QQFA-C3-**	20

Watt, VAr and Power Factor – 2 Quadrant

A Watt, VAr and Power Factor – 2 Quadrant true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4-20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V a.c. D.C.: 12, 24, 48, 110, 120 or 135V D.C.

Product Code – Single phase, 2 wire 1 element, 3 D.C. Outputs

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XGK*-QQFA-C3-**	14

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XSW*-QQFA-C3-**	32

Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XSM*-QQFA-C3-**	31

Product Code – 3 phase, 4 wire balanced load, 1 element, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XSH*-QQFA-C3-**	28

Product Code – 3 phase, 3 wire balanced load, 1 element, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XSL*-QQFA-C3-**	27

With multiple analog outputs, do not common the -ve terminals.

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Watt, VAr and Power Factor – 4 Quadrant

A Watt, VAr and Power Factor – 4 Quadrant true RMS measurement transducer providing exceptional waveform handling on distorted waveforms. Available with auxiliary power or self powered models.

Specification

Inputs:	63.5, 100, 110, 120, 220, 230, 240, 380, 400, 415, 440V and 480V A.C.
Current:	1 or 5A A.C.
Frequency:	40 to 65Hz
Outputs:	0/1mA, 0/5mA, 0/10mA, 0/20mA, 4/20mA.
Auxiliary Power:	A.C. 63.5, 100, 110, 115, 120, 200, 208, 220, 240, 277, 380, 400, 415, 440, 480V D.C.: 12, 24, 48, 110, 120 or 135V

Product Code – 3 phase, 4 wire balanced load, 1 element, 3 D.C. Outputs

Input A.C.	Frequency Hz	O/P D.C.	Catalog No.	Connection Diag.
120V, 5A	40-65Hz	0/1mA	256-XJH*-QQFA-C3-**	28

Product Code – 3 phase, 3 wire balanced load, 1 element, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XJL*-QQFA-C3-**	27

Product Code – 3 phase, 4 wire unbalanced load, 3 elements, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XJW*-QQFA-C3-**	32

*With multiple analog outputs, do not common the -ve terminals.

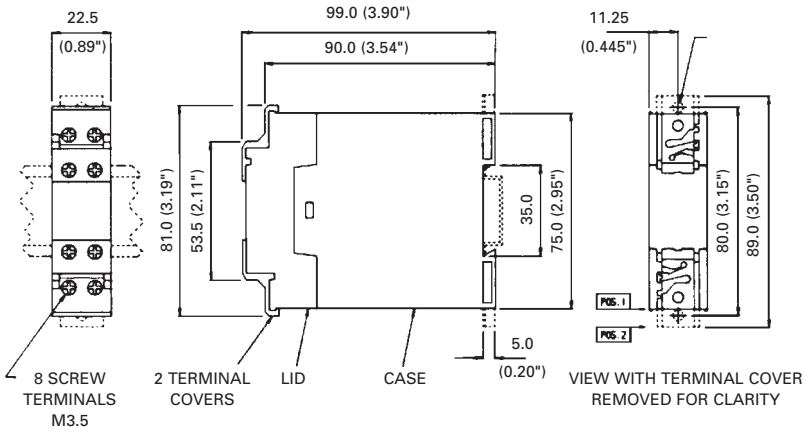
Product Code – 3 phase, 3 wire unbalanced load, 2 elements, 3 D.C. Outputs

120V, 5A	40-65Hz	0/1mA	256-XJM*-QQFA-C3-**	31

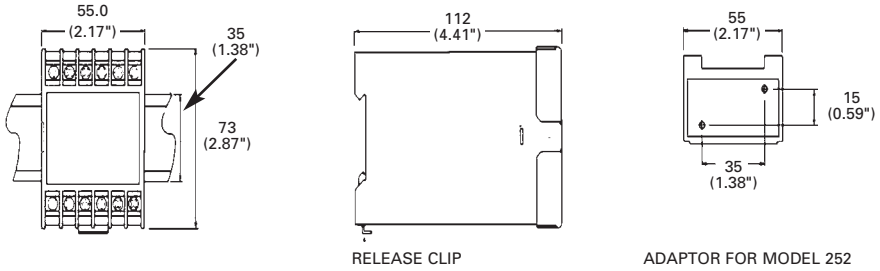
Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

Dimensions

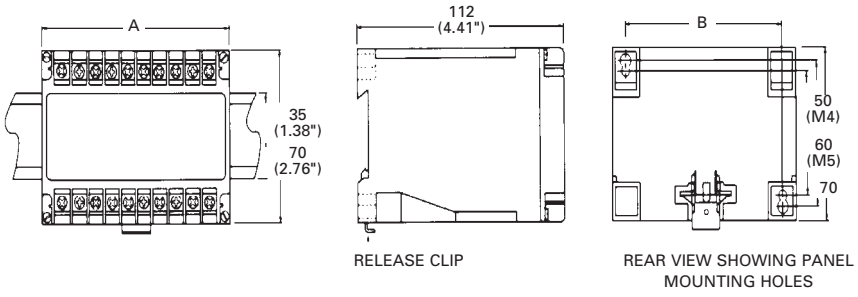
Model 250



Model 252



Model 253, 256



Model	A mm	A inches	B mm	B inches
250	22.5	0.88	-	-
252	55	2.17	-	-
253	75	2.96	60	2.36
256	150	5.90	135	5.31

Mounting Details

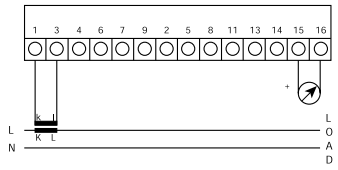
Position 1 - DIN Top Hat Rail Mounting (DIN ENS0022-35)
Position 2 - Screw Mounting To Suit M4 Fixings

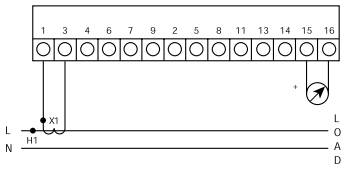
Notes on connection diagrams

1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

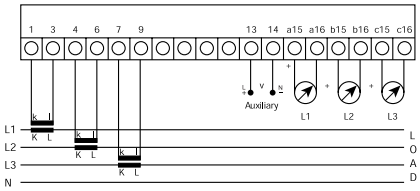
Connection Diagrams

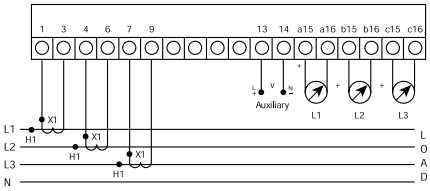
Type 252-XAA, Type 253-TAA
Single Phase Current, Self Powered – Diagram 1



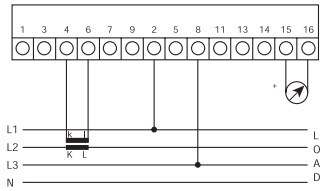


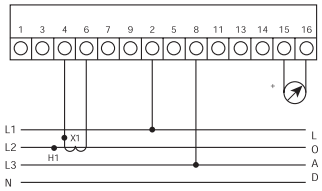
Type 256-XAS/XAR, Type 256-TAS, TAL, TAR
3 Ø Current, 3 Outputs – Diagram 2



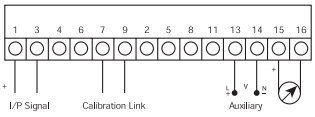


Type 256-TAB
Bi-directional 3 Ø 3 Wire Current – Diagram 3



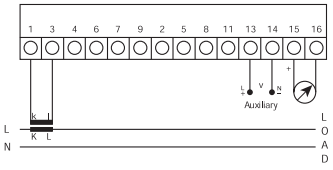


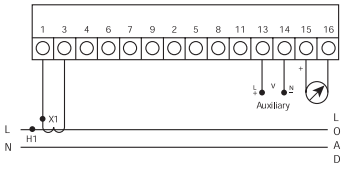
Type 253-TDP/TDN/TDM
Integrating D.C. Current – Diagram 4



Type 253-ISA
Single Isolator – Diagram 5

Type 252-XAS/XAR/XAL, Type 253-TAL/TAR
Single Phase Current – Diagram 6



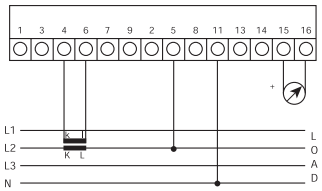


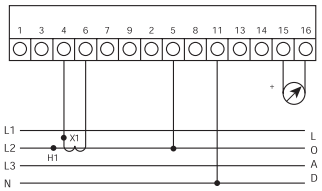
Notes on connection diagrams

1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

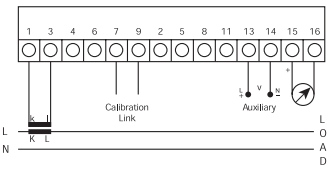
Connection Diagrams

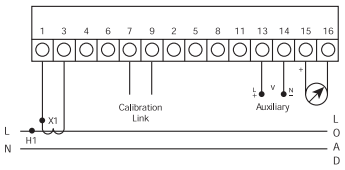
Type 256-TAB
Bi-directional Single Phase and 3 Ø 4 Wire Current – Diagram 7



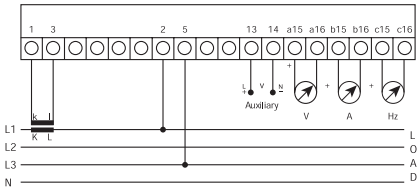


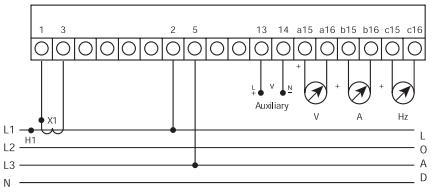
Type 253-TAP/TAN/TAM
Integrating A.C. Current – Diagram 8



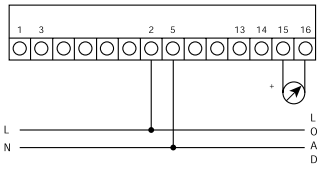


Type 256-XLK
Voltage, Current and Frequency, 3 Outputs – Diagram 9

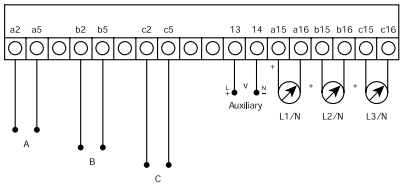




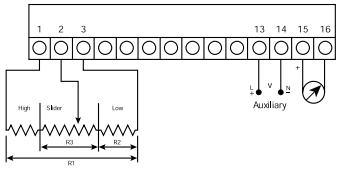
Type 252-XVA & Type 253-TVA
Single Phase Voltage Self Powered
Type 253-XHA, 253-THZ
Frequency – Diagram 10



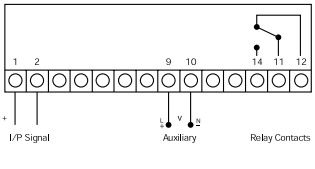
Type 256-TVL, TVR, TVS, TVW
Type 256-XVU, XVW, XVY, XVX
3 x 1Ø Voltages 3 Outputs – Diagram 11



Type 253-TIK
Tap Position and Slideware
Transmitter – Diagram 12



Type 253-TRP/TRT
Linear Integrator – Diagram 13



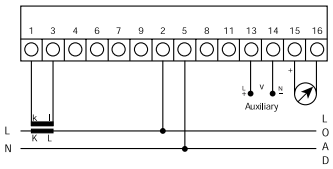
Notes on connection diagrams

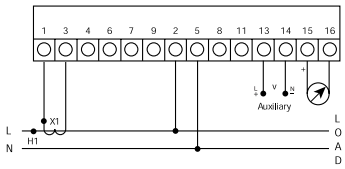
1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).
5. Model 256-XDK has 2 outputs (a) and (b).
6. Models 256-XEK and 256-XGK have 3 outputs (a), (b) and (c).

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

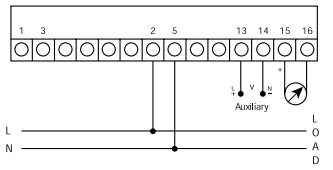
Connection Diagrams

Type 256-XWK/XXK/XYK/XDK/XEK/XGK/XFS/XFA/XPS/XPA
Type 256-TWK/TXK/TYK/TPS/TPA/TFA/TFS/TFC
Single Phase, Watts or Vars or VA or Phase Angle or Power Factor, Watt and Var: Watt, Var and VA: Watt, Var and Power Factor.
One Output – Diagram 14

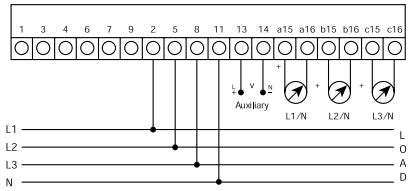




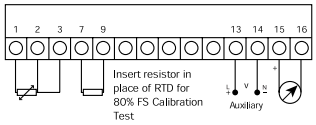
Type 252-XVS, XVZ, XVR, XVL, XHL, XHS
Type 253-TVL, TVR, TVZ
Single Phase Voltage – Diagram 15



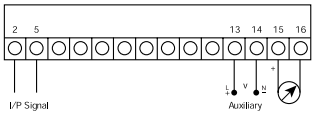
Type 256-XVS/XVR/XVZ/XVL
3 Ø 4W Voltage, 3 Outputs
Diagram 16



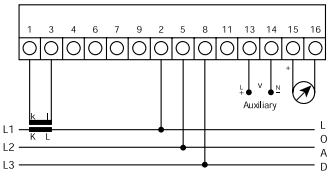
Type 253-TRR
Temperature Transmitter – Diagram 17

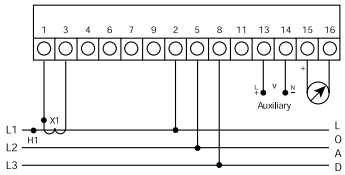


Type 256-TTA/M/V/F/C/N
D.C./D.C. Transducer and Temperature – Diagram 18

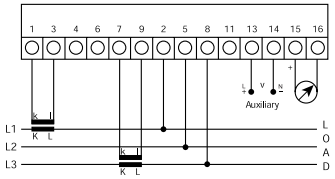


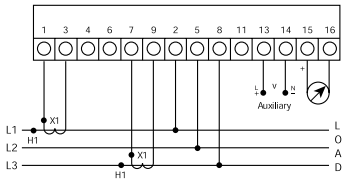
Type 256-XWL/XXL/XYL/XFW/XPW/XPG/XFG
Type 256-TWL/TPB/TFB/TFE
3 Ø 3W balanced load, Watts or Vars or VA or Phase Angle or Power Factor.
One Output – Diagram 19





Type 256-XWM/XXM/XYM/XZM/XFU/XFC/XPU/XPC
Type 256-TWM/TXM/TYM
3 Ø 3W unbalanced load, Watts or Vars or VA or Phase Angle or Power Factor.
One Output – Diagram 20





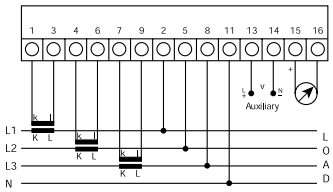
Notes on connection diagrams

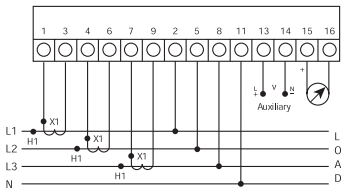
1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

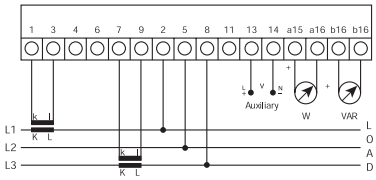
Connection Diagrams

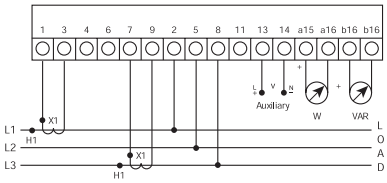
Type 256-XWW/XXW/XYW/XZW/XFT/XFB/XPT/XPB
3 Ø 4W unbalanced load, 3 elements,
Watts or Vars or VA or Phase Angle or Power Factor.
One Output – Diagram 21



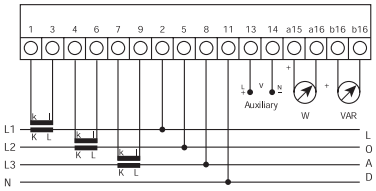


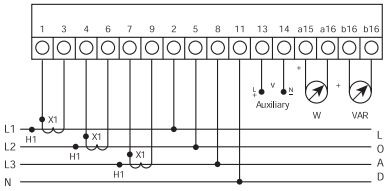
Type 256-XDM
3 Ø 3W unbalanced load, Watt and Var, 2 Outputs – Diagram 22



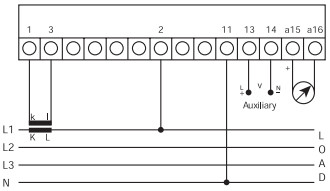


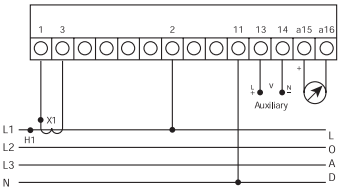
Type 256-XDW
3 Ø 4W unbalanced load, 3 elements, Watt and Var, 2 Outputs – Diagram 23



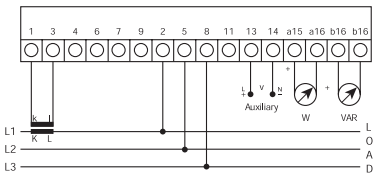


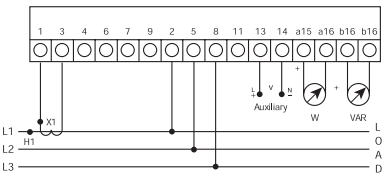
Type 256-XWH/XXH/XYH/XFV/XFD/XPV/XPD
Type 256-TWH/TXH/TYH
3 Ø 4W balanced load, WattS or Vars or VA or Phase Angle or Power Factor
1 Output – Diagram 24





Type 256-XDL
3 Ø 3W balanced load, Watt and Var, 2 Outputs – Diagram 25



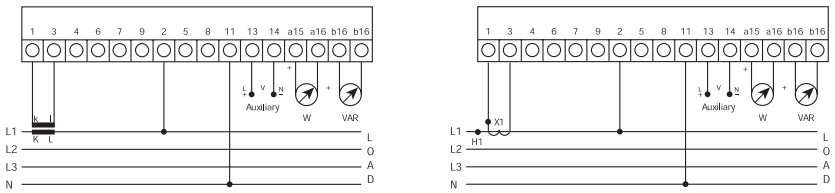


Notes on connection diagrams

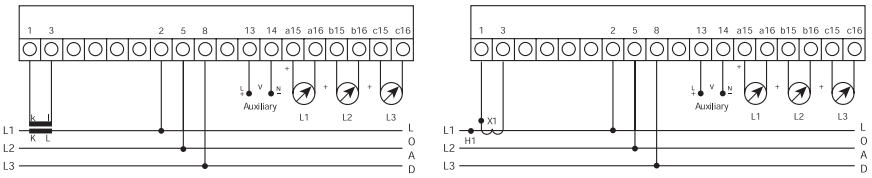
1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

Connection Diagrams

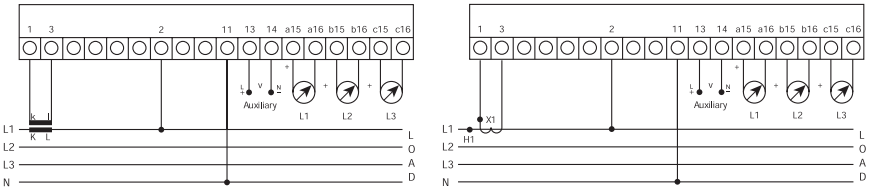
Type 256-XDH
3 Ø 4W balanced load, Watt and Var, 2 Outputs – Diagram 26



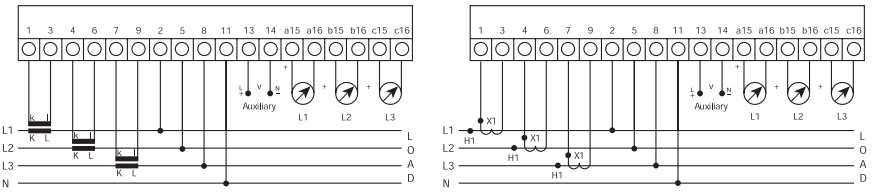
Type 256-XRL/XSL/XJL
3 Ø 3W balanced load, Watt, Var and VA:
Watt, Var and Power Factor, 3 Outputs – Diagram 27



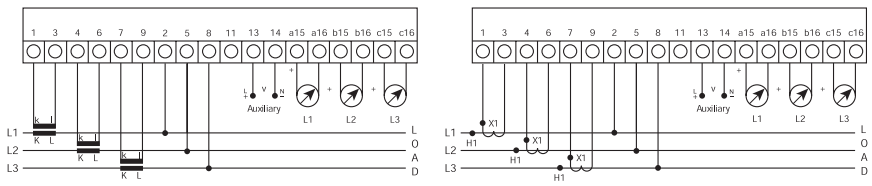
Type 256-XRH/XSH/XJH
3 Ø 4W balanced load, Watt, Var and VA:
Watt, Var and Power Factor, 3 Outputs – Diagram 28



Type 256-XWE/XXE/XYE/XFE/XFF/XPE/XPF
3 Ø 4W unbalanced load, Watts or Vars or VA or Phase Angle or Power Factor
3 Outputs – Diagram 29



Type 256-XRM/XSM/XJM
3 Ø 3W unbalanced load, Watt, Var and VA: Watt, Var and Power Factor,
3 Outputs – Diagram 31

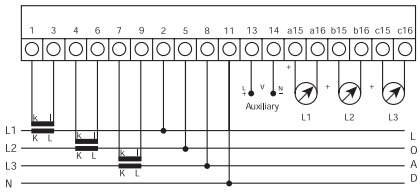


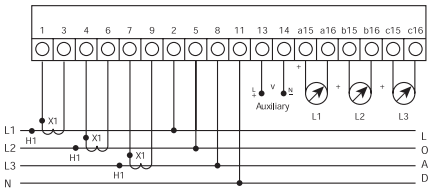
Notes on connection diagrams

1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

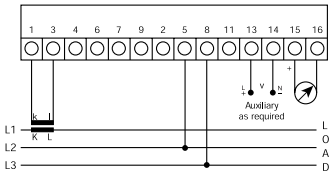
Connection Diagrams

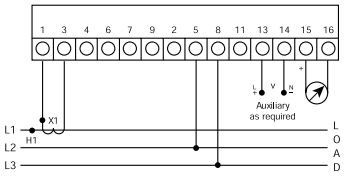
Type 256-XRW/XSW/XJW
3 Ø 4W unbalanced load, 3 elements, Watt, Var and VA: Watt, Var and Power Factor
3 Outputs – Diagram 32



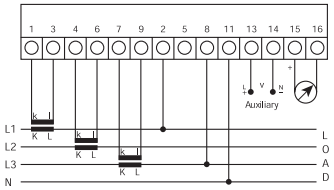


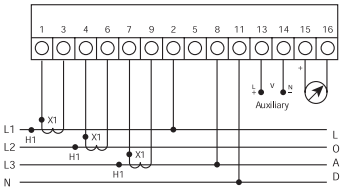
Type 256-TWE/TXG/TPT
3 Phase 3 wire balanced load, Watts, Vars or Phase Angle – Diagram 34



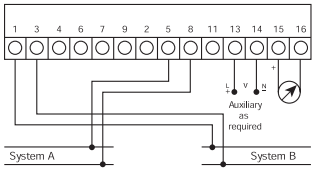


Type 256-TWN/TXP/TYN
3 Ø 4W unbalanced load, Watts or Vars, or VA – Diagram 35

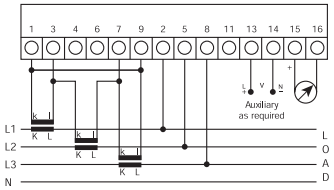


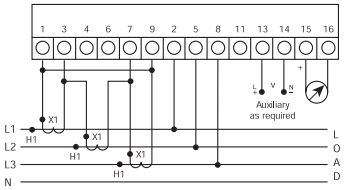


Type 256-TPD
Phase difference transducer, 2 voltage inputs – Diagram 36



Type 256-TXJ
3 Ø 4W unbalanced load, Vars, Delta connected CT's – Diagram 37





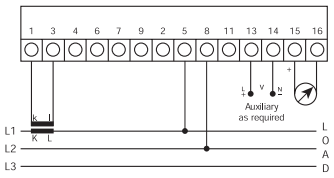
Notes on connection diagrams

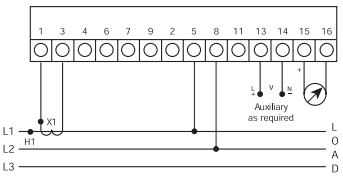
1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

Information Provided By:
MetersUSA
Meters@MetersUSA.com
WWW.MetersUSA.com

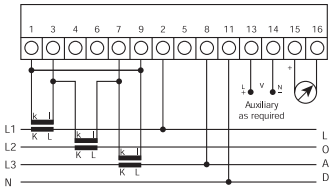
Connection Diagrams

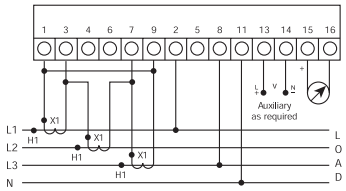
Type 256-TWS
3 Ø 3W balanced load, Watts – Diagram 38



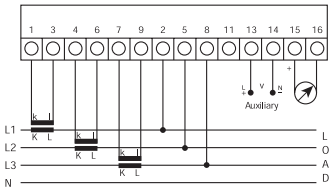


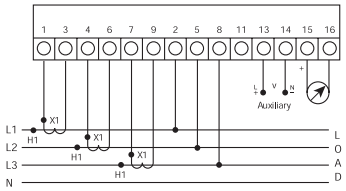
Type 256-TWJ/TYJ
3 Ø 4W unbalanced load, Watts or VA Delta connected CT's – Diagram 39





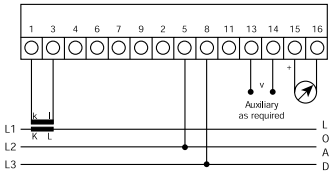
Type 256-TXN
3 Ø 4W, unbalanced load, Vars – Diagram 40

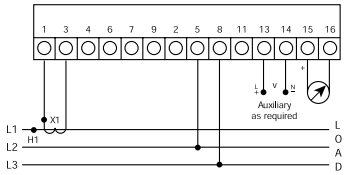




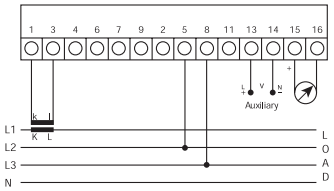
25D-ODA
Pin 2 = data, 4 and 5 = power for ODA, 6 and 20 = power for ODA, 7 = ground

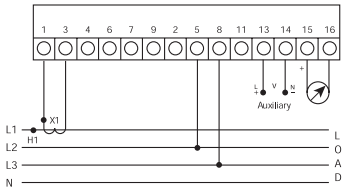
Type 256-TYG, XWL
3 Ø 3W balanced load, VA, WATT – Diagram 41





Type 256-TPT/TFT/TXH/TYH
3 Phase 3/4W, balanced load, Phase Angle or Power Factor – Diagram 42



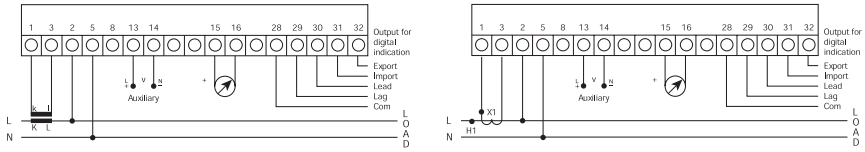


Notes on connection diagrams

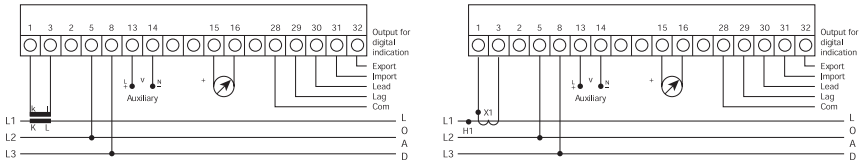
1. When using more than one item via a Current Transformer, the inputs must be in series.
2. Auxiliary supply applies only if ordered. For maximum performance an A.C. or D.C. auxiliary is recommended. Self powering is achieveable for a voltage variation of less than 20%.
3. When there is more than one output the outputs are in the sequence of the description i.e. on a Watt, Var and VA transducer, output (a) is Watt, (b) is Var and (c) is VA.
4. Where more than one output is provided - please note there is no isolation between outputs. You may require a signal isolator (Module 250-ISA).

Connection Diagrams

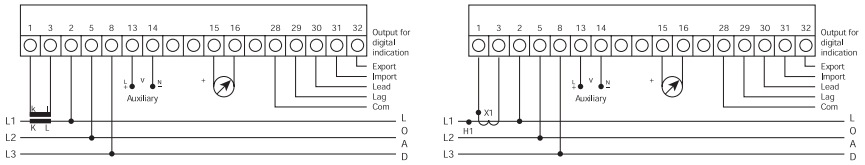
Type 256-TDA/TDC/TDS
4 Quadrant, single phase power factor with an output for a Digital Indicator – Diagram 43



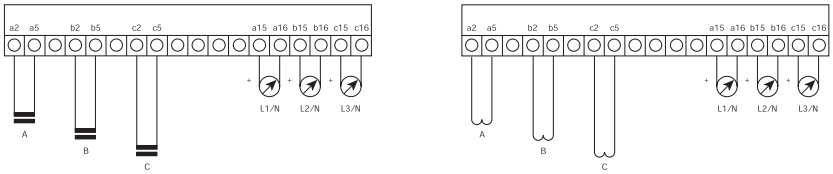
Type 256-TDT
3 Phase 3/4W, balanced load, Power Factor, with an output for a digital indicator – Diagram 45



Type 256-TDB/TDE
4 Quadrant, 3 Phase 3/4W, Wire Balanced Load, Power Factor with an output for a digital indicator – Diagram 46



Type 256-TAA
3 x 1Ø Current, Outputs – Diagram 47



Type 256-XVW/XVY/XVX
3 Ø 3W Voltage, 3 Outputs – Diagram 48