

CONVERTIBLE AMPLIFIERS				
Current Mode				
Convertible Source AC Ranges	Convertible Source DC Ranges	Power	Resolution AC Ranges	Resolution DC Ranges
6 X 0.5, 1.0 A RMS (L-N)	6 X 0.354, 0.707 A DC	6 X 75VA / 75 W	0.0001 A	0.0001 A
3 X 0.5, 1.0, 2.0 A RMS (L-N)	3 X .354, 0.707, 1.41 A DC	3 X 150VA / 150 W	0.0001 A	0.0001 A
1 X 1.5, 3.0, 6.0 A RMS (L-N) S1 S2 S3	1 X 1.06, 2.12, 4.24 A DC S1 S2 S3	1 X 450VA / 450 W S1 S2 S3	0.001 A	0.001 A
Current Transient Mode				
Convertible Source AC Ranges	Convertible Source DC Ranges	Power	Resolution AC Ranges	Resolution DC Ranges
6 X 0.75, 1.5 A RMS (L-N)	6 X 0.53, 1.06 A DC	6 X 97.5VA / 97.5 W	0.0001 A	0.0001 A
3 X 0.75, 1.5, 3.0 A RMS (L-N)	3 X 0.53, 1.06, 2.12 A DC	3 X 195VA / 195 W	0.0001 A	(0.0001 A) @ 0.53, 1.06 A DC (0.001 A) @ 2.12 A DC
1 X 2.25, 4.5, 9.0 A RMS (L-N) S1 S2 S3	1 X 1.59, 3.18, 6.36 A DC S1 S2 S3	1 X 585VA / 585 W S1 S2 S3	0.001 A	0.001 A
Voltage Mode				
Convertible Source AC Ranges	Convertible Source DC Ranges	Power	Resolution AC Ranges	Resolution DC Ranges
6 X 75, 150V RMS (L-N)	6 X 106, 212V DC	6 X 75VA/ 75W	0.01 V	(0.01 V) @ 106V DC (0.1 V) @ 212V DC
3 X 75, 150, 300V RMS (L-N)	3 X 106, 212, 424V DC	3 X 150VA / 150 W	0.01 V	(0.01 V) @ 106V DC (0.1 V) @ 212, 424V DC
1 X 150, 300, 600V RMS (L-L) S1 & S2	1 X212, 424, 848V DC S1 & S2	1 X 300VA / 300 W S1 & S2	0.01 V	0.1 V DC

ENHANCED CURRENT AMPLIFIERS				
AC Ranges	DC Ranges	Power	Resolution AC Ranges	Resolution DC Ranges
6 X 8.75, 17.5, (35)* A RMS (L-N)	6 X 5.83, 11.7, (23.3)* A DC	6X 87.5VA / 87.5 W; (6 X 131.25VA /131.25 W)*	0.001 A	(0.001) A @ 5.83 A DC (0.01) A @ 11.6, (23.3)* A DC
3 X 8.75, 17.5, 35,(70)* A RMS (L-N)	3 X 5.83, 11.7, 23.3,(46.6)* A DC	3 X 175VA / 175 W; (3 X 262.5VA /262.5 W)*	(0.001) A @ 8.75, 17.5, 35 A RMS (0.01) @ (70)* A RMS	(0.001) A @ 5.83 A dc (0.01) A @ 11.7, 23.3, (46.6)* A DC
1 X 8.75, 17.5, 26.25,52.5, 105, (210)* A RMS (L-N) S1 S2 S3	1 X 5.83, 11.7, 17.5, 35,70, (140)* A DC S1 S2 S3	1 X 525VA / 525 W; (1X787.5VA/787.5 W)* S1 S2 S3	(0.001) A @ 8.75, 17.5, 26.25 A RMS (0.01) A @ 52.5, 105, (210)* A RMS	(0.001) A @ 5.83 A DC (0.01) A @ 11.7, 23.3, 35, 70, (140)* A DC

* Maximum power delivered at high source range

AC Amplitude Accuracy @ 50-60 Hz @ 20° - 30° C		Phase Angle @ 50/60 Hz			Frequency		
Typical	Guaranteed	Range	Accuracy	Resolution	Bandwith	Range	Resolution
0.02% of reading + .01% of range	0.09% of reading + .04% of range	(+359.9°) -(0°) - (-359.9°)	± 0.25°	± 0.1°	DC - 3kHz at Full Power	DC, 0.1 Hz - 2.0 KHZ Continuous Full Load	0.001 Hz
Convertible Source in Current Mode @ 20° - 30° C					Accuracy		
Guaranteed		Typical	Guaranteed		Typical	@ 20° - 30° C	@ 0° - 50° C
<0.5%		<0.02%	<0.1%		0.5 ppm	1.5 ppm	10 ppm

Logic Inputs (Voltage or Contact Sense)	
Total Inputs:	8*
Isolated Inputs	
Inputs:	2 (First Strike)
Voltage Sense:	250V RMS AC / 300V DC
Open Circuit Test Voltage:	12V DC
Short Circuit Test Current:	20mA DC
Response Time:	0.1 msec max pickup /dropout
Input Impedance:	150K Ω
Isolation:	\pm 500V peak
Paired Inputs	
Inputs:	3 Pairs (6)
Voltage Sense:	250V RMS AC / 300V DC
Open Circuit Test Voltage:	4V DC
Short Circuit Test Current:	>50mA DC
Response Time:	0.1 msec max pickup /dropout
Input Impedance:	150K Ω
Isolation:	\pm 500V peak

* Additional 8 inputs available with F6816 option

Logic Outputs		
Type:	FET (High Speed Electronic)	Relay
Number:	4	4
Isolation Voltage:	\pm 500V peak	\pm 500V peak
Response Time:	0.1 millisecond pick up /dropout	<10 millisecond pick up /dropout
Maximum (Make/Break Current):	0.5 amps	(Breaking cap AC: 2000 VA with Vmax 250V, Imax 8 A) (Breaking cap DC: 50W with Vmax 300 V, Imax 8A)
Input Voltage:	250 V RMS	250 V RMS
Metering Functions		Variable Output Battery Simulator
DC Meter Inputs		
Range:	6 - 300V DC	
Input Range:	0 - \pm 10V DC / 0 - \pm 20mA DC	
Resolution:	0.3V	
Typical:	<0.003%	
Power:	90 W, 1.5 A max	
Guaranteed:	<+0.05%	
50/60 Hz Ripple:	<0.2% of Range	
AC Sources		
Accuracy:	< \pm 5%	
Typical:	<0.02% of metering loads	
Logic Input As Counters		
Frequency:	10 kHz	
Pulse width:	>175 μ sec	

(AIM) Analog Input Measurement (F6820 Option)	
Recording:	8 external Analog or Digital Signals
Internal Source recording:	12 Sources
Ranges:	250 mV, 2.5V, 25V, 250V RMS
Bandwidth:	DC, 0-5kHz
Input Impedance:	150K Ω
Max Input Voltage:	250V RMA AC / 300V DC
Isolation:	\pm 500V peak channel to channel
Accuracy	
Typical:	\pm 0.06%
Maximum:	\pm 0.15%
Timing and Trigger	
Timers Number:	8
Max Recording Time:	<24 Hours
Accuracy:	\pm 0.0005% of reading, \pm 50 μ sec
Resolution:	100 μ sec

General Specifications							
Enclosure:	High-impact, molded, flame-retardant ABS-meets National Safe Transit Association testing specification No.1A for immunity to severe shock and vibration	Environmental:	IEC 60068-2-2 Dry Heat (+85°C storage; + 50°C Rating Operating), IEC 60068-2-1 Cold (-50°C storage; 0°C operating), IEC 60068-2-30 Damp Heat (+55°C, 6 cycles, 95% humidity), NEMA Enclose Rating Type 1IEC Enclosure IP20	Electrostatic Discharge Immunity:	IEC 801-2 I.E.C. performance level 1 @ 10kV: normal performance within specifications. I.E.C. performance level 2 @ 20kV: no permanent damage.	IEC61850 GOOSE:	Certified by KEMA as being compliant with IEC61850 protocol (IEC61850-7-2 and 8-1)
Mechanical:	IEC 60068-2-27 Shock (15g/11ms, half sine) IEC 60068-2-6 Vibration (10-150 Hz, 20m/s ²) IEC 60068-2-6 Drop Test	EMC Emissions:	FCC 47 CFR Part 15 Class A (USA), EN55011:1998/A1:1999/A2:2002 Group 1 Class A ISM(EU), AS/NZS CISPR 11:2004 Class A ISM (Australia), ICES-001 Issue 3 ISM (Canada)	Surge Withstand Capability:	ANSI/IEEE c37.90. The simulator functions as a source during surge withstand capability tests, when the ANSI/IEEE specified isolating circuit is interposed between the simulator and the test relay.	IEC61850 Sample Values (Publishing):	80 samples per cycles for nominal frequencies 50Hz and 60Hz using GPS time synchronized signals
Weight:	42lb, 19.05kg (front cover and strap included)	EMC Immunity:	EN 61000-6-2:2005; IEC 61000-4-2/3/4/5/6/11	Line Power Supply:	105-264V, 47-63 Hz	Communication Interfaces (Ethernet, Wi-Fi, USB)	Ethernet or USB control to PC, Wi-Fi (802.11 B+G bands, 30 - 80ft, 9 - 24m)
Dimensions:	15 X 9.5 X 18 inches, 38 X 24 X 45.7 cm	Quality Assurance Management System:	Third Party certification to ISO 9001:2000	Safety:	EN 61010-1; UL 61010-1; CSA 27.2 # 61010-1		
Calibration:	Certification traceable to N.I.S.T. standards	Humidity:	Up to 95% relative humidity, non-condensing				

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