SSAC THREE PHASE VOLTAGE MONITORS						
Three Phase Voltage Monitors	**WVM**	**DLM**	**PLM**	**PLMU**	**TVM**	**PLS**
Line Voltage						
Type	3 Phase Delta or Wye with no connection to neutral					
Line Frequency	50…60 Hz					
Phase Sequence	ABC					
Output Circuit						
Type	Isolated SPDT Electromechanical Relay; Energized when voltages are acceptable and phase sequence is correct					
Rating	10A resistive @ 250 VAC; 6A inductive @ 250 V AC	10 A resistive @240 V AC 1/4 hp @ 125 V AC; 1/3 hp @ 250 V AC	8 A resistive @ 240 V AC	10 A resistive @240 V AC 1/4 hp @ 125 V AC; 1/3 hp @ 250 V AC	208…240 V AC (40ºC) 10 A resistive @ 125 V AC, 5 A @250 V AC, 1/4hp @ 125 V AC	120 & 240 V AC 10 A resistive @ 240 V AC
					10 A resistive @240 V AC 1/4 hp @ 125 V AC; 1/3 hp @ 250 V AC	380 & 480 V AC 8 A resistive @ 240 V AC
Max Contact Voltage	277 V AC					
Operating Voltage	200. . . 600 V AC in 4 ranges	110…600 V AC in 5 ranges	200…480 V AC in 3 ranges	200…480 V AC Universal	Fixed; 208…480V AC	120…480 V AC in 4 ranges
Overvoltage, Undervoltage, & Voltage Unbalance						N/A
Overvoltage Trip Point	109. . .113% of adjusted line voltage					N/A
Reset Voltage	-2% of Trip Point	-3% of trip voltage		-2% of trip voltage	≃ -3% of trip voltage	N/A
Undervoltage Trip Point	88. . .92% of adjusted voltage					N/A
Reset Voltage	+2% of Trip Point	+ 3% of trip voltage		+2% of trip voltage	≃ +3% of trip voltage	N/A
Voltage Unbalance	Adjustable from 2. . .10%	Adjustable from 2…8%	Factory fixed from 4…8%	Adjustable from 2…10% or fixed 4…10%	Factory fixed 4…10%	N/A
Trip Delay (All +/- 15%)	Adjustable from 0.25. . .30s	Adjustable from 2…20 s	Factory fixed from 2…20 s +/-	Adjustable 0.25…30 s	Fixed from 0.3s…100s +/- 15%	≤ 25ms
Phase Loss (Severe Unbalance Spec)	≥ 15% unbalance	N/A	N/A	≥ 15% unbalance	≥ 15% unbalance	N/A
Response Time to Phase Loss & Reversal	≤ 200ms	≤ 100 ms		≤ 150 ms	≤ 200 ms	≤ 50ms
Reset	Automatic or Manual	Automatic				
Random Start Delay Range	3. . .15s					
Restart Delay	0.25 s…64 m in 3 ranges	N/A	N/A	≃0.6s	Fixed, from 0.5s…999m, +/-15%	≤ 50 ms
Fault Memory	Nonvolatile; Stores last 10 faults					
Status Indicators	6 LEDs provide existing status & memory readout	Red LED	Red LED	Bi-color LED	Bi-color LED	N/A
Protection Surge	IEEE C62.41- 1991 Level B					N/A
Isolation Voltage (Input to output)	≥ 2500 V RMS input to output				204…240 V AC ≥ 1500 RMS 380…480 V AC ≥ 2500 RMS	120 & 240 V AC ≥ 1500 RMS 380 & 480 V AC ≥ 2500 RMS
Circuitry	N/A	Encapsulated	Encapsulated 380 & 480 V	N/A	Encapsulated	N/A
Mechanical						
Mounting	Surface with 4 #8 (M4 x 0.7) screws	35mm DIN Rail or surface	8 pin plug-in socket rated 600 V AC		Surface mount with one #8 (M5 x 0.8) screw	Plug-in socket rated 600 V AC
Package Dimensions	4.4 X 6.9 X 2.4 in (112 X 175 X 61mm)	1.97 X 2.95 X 4.33in (50 x75x110mm)	1.78 x 2.39 x 3.2 in. (45.2 x 60.7 x 81.3mm)	1.78 x 2.39 x 3.03 in. (45.2 x 60.7 x 77.0mm)	2 X 2 X ≤ 1.86 in (50.6 X 50.6 X ≤ 47.7mm	1.78 X 2.39 X 2.91 in (45.2 X 60.7 X 73.9mm)
Termination	Screw terminals with captive wire clamps for up to #12 AWG (3.2mm^{2}) wire	Screw terminals with captive wire clamps for up to #14 AWG (2.5mm$^{2)}$ wire	8-pin octal socket		0.25 in (6.35mm) male quick connects	8-pin, octal socket
Environmental						
Operating Temperature	-40º C... +65º C	-40ºC…+60ºC	240&480VAC -40ºC…+60ºC 480VAC -40ºC…+50ºC	-40ºC….+60ºC	See Chart	-40ºC….+55ºC
Storage Temperature	-40ºC…+85ºC				208…240 V AC -30ºC…+85ºC 380…480 V AC -40º…+85ºC	-40ºC…+60ºC
Weight	≃ 25oz (709g)	120&480VAC ≃ 8.6oz (244g) 380…600VAC 16.3oz (462g)	240VAC ≃ 6.1 oz (173g) 380&480VAC ≃ 9.3oz(264g)	≃ 8.6 oz (244g)	208/240 ≃ 2.8 oz (79.4g) 380/480 ≃ 4.3 oz (121.9g)	≃ 6 oz (170g)
Life	Mechanical -- 1 x 10$^{6;}$ Electrical -- 1 x 10^{5}					N/A
Humidity	95% relative, non condensing				95% relative, non condensing	