

Current Switches

Available Features	AS0	AS1	AS3	ASC	ASD	ASL	ASM	ASX	ASXP	ATS	DS1	DS3
AC Input Current	X	X	X	X	X	X	X	X	X	X		
DC Input Current											X	X
Max. Input Current-Amps	0.35	150	175	150	200	150	150	200	1600	1200	500	100
Adj. Set-Point	X	X	X	Factory	X	X		X	X	X		X
Fixed Set-Point		X		Factory							X	
Self-Calibrating							X					
Single Input Range		X		X	X	X	X	X	X	X	X	
Multiple Input Ranges	X		X									X
Normally Open Output	X	X	X	X	X	X	X	X		X	X	X
Normally Closed Output	X	X	X	X	X	X	X	X		X		
Form C Relay Output			X						X	X		X
Self-Powered		X	X	X		X	X	X				
Externally Powered	X				X				X	X	X	X
Solid-Core Case	X	X	X	X	X	X	X	X	X	X	X	X
Split-Core Case		X	X	X		X	X	X	X			
Status LED or Display	X	X	X	X	X	X		X	X	X		X
Time Delay								X	X			

Current Transducers

Available Features	AT	ATH	ATR	ATP	ATPR	ATQ	ATS	DLT	DT
AC Input Current	X		X	X	X	X	X		
DC Input Current								X	X
Unipolar								X	X
Bipolar or Bidirectional								X	X
Max. Input Current-Amps	2000	200	2000	2000	2000	200	1200	400	1200
True RMS		X	X		X	X			
Output, 4-20 mA	X	X	X	X	X		X	X	X
Output, 0-5 or 0-10 VDC	X	X		X	X		X		X
Output, Frequency						X			
Single Input Range	X		X				X	X	X
Multiple Input Ranges	X	X	X	X	X	X			X
Loop-Powered	X		X					X	
Externally Powered		X		X	X	X	X		X
Self-Powered	X								
Solid-Core Case	X	X	X	X	X		X	X	X
Split-Core Case	X	X	X	X	X	X		X	X

Ground Fault Sensors

Available Features	AG	AGL	AGT
AC Fault Current Max. (mA)	950	950	100
Factory Adjusted Setpoint	X	X	
User Adj. Setpoint (5-10-30 mA)	X	X	
Normally Open Output	X	X	
Normally Closed Output	X	X	
Form C Relay Output	X	X	
Output, 4-20 mA			X
Power Supply, 24 VAC/VDC	X	X	
Power Supply, 120 VAC	X	X	
Power Supply, 240 VAC	X		
Loop-Powered			X
Latching	X	X	
Energized or De-energized	X	X	
Noise Immunity Option	X	X	
Solid-Core	X	X	X

Voltage Transducers

Available Features	VTD	VTR
DC Input Voltage Max. (volts)	600	
AC Input Voltage Max. (volts)		600
True RMS		X
Loop-Powered		X
Externally Powered, 24 VAC or VDC	X	
Output, 4-20 mA	X	X
Output, 0-5 or 0-10 VDC	X	
Single Input Range	X	X
DIN Rail Case	X	X

Power Monitors

Available Features	APN	APS	APT
Single Phase	X	X	X
Three Phase	X		X
AC Input Voltage Max. (volts)	600	600	600
Output, 4-20 mA		X	X
Output, 0-5 or 0-10 VDC			X
Loop-Powered		X	
Externally Powered	X		X
External CTs - 5 A	X		X
External CTs - Rogowski Coil	X		
External CTs - 333 mV	X		X
Modbus RTU Communications	X		



NK Technologies

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Wire Size	Copper, Dia. In. (mm) THW/THWN (75° C)	Rating (A)
18 AWG	0.11 (2.8)	
16	0.12 (3.0)	
14	0.16 (4.1)	15
12	0.18 (4.6)	20
10	0.20 (5.1)	30
8	0.28 (7.1)	50
6	0.32 (8.1)	65
4	0.37 (9.4)	85
3	0.40 (10.2)	100
2	0.43 (10.9)	115
1	0.51 (12.9)	130
1/0	0.55 (14.0)	150
2/0	0.59 (15.0)	175
3/0	0.65 (16.5)	200
4/0	0.70 (17.8)	230
250 MCM	0.79 (20.1)	255
300	0.84 (21.3)	285
350	0.89 (22.6)	310
400	0.94 (23.9)	335
500	1.03 (26.2)	380
600	1.14 (29.0)	420
700	1.21 (30.7)	460
750	1.25 (31.8)	475
800	1.28 (32.5)	490
900	1.34 (34.0)	520
1000	1.40 (35.6)	545
1250	1.58 (40.1)	590
1500	1.70 (43.2)	625
1750	1.82 (46.2)	650
2000	1.92 (48.8)	665

Full Load Amps, 3 - Phase

HP	Voltage			
	208	240	480	600
0.5	2.5	2.2	1.1	0.9
0.75	3.7	3.2	1.6	1.3
1	48.0	4.2	2.1	1.7
1.5	6.9	6.0	3.0	2.4
2	7.8	6.8	3.4	2.7
3	11.0	9.6	4.8	3.9
5	17.5	15.2	7.6	6.1
7.5	25.3	22.0	11.0	9.0
10	32.3	28.5	14.0	11.0
15	48.3	42.0	21.0	17.0
20	62.1	54.0	27.0	22.0
25	78.2	68.0	34.0	27.0
30	92.0	80.0	40.0	32.0
40	120.0	104.0	52.0	41.0
50	150.0	130.0	65.0	52.0
60	177.0	154.0	77.0	62.0
75	221.0	192.0	96.0	77.0
100	285.0	248.0	124.0	99.0
125	359.0	312.0	156.0	125.0
150	414.0	360.0	180.0	144.0
200	552.0	480.0	240.0	192.0

Full Load Amps, 1 - Phase

HP	Voltage	
	120	240
1/6	4.4	2.2
1/4	5.8	2.9
1/3	7.2	3.6
1/2	9.8	4.9
3/4	13.8	6.9
1	16	8
1.5	20	10
2	24	12
3	34	17
5	56	28
7.5	80	40
10	---	50

NK Case Size

Case Style	Aperture Dia. (in)	(mm)
CC	0.30	7.6
FF	0.55	14.0
FT	0.74	19.0
SP	0.85 sq.	21.6 sq.
FL	0.75	19.1
DL	1.81	46.0
FL	3.00	76.2
MS	1.19 x 2.22	30.1 x 56.4
LS	2.30 x 3.42	58.4 x 86.9
Flex. Coil	3.25 or 5.25	82.5 or 133.4

Wire Bundle Diameter Calculation

D = Dia. of Bundle
d = Dia. of a Single Wire
N = Total Number of Wires

$$D = 1.155 \times d \times (\text{Sq. Root of } N)$$



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