

USED ON

DWG NO 7-2252003-6

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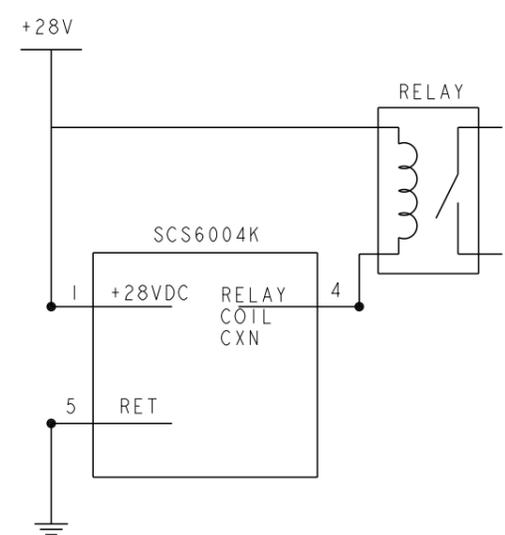
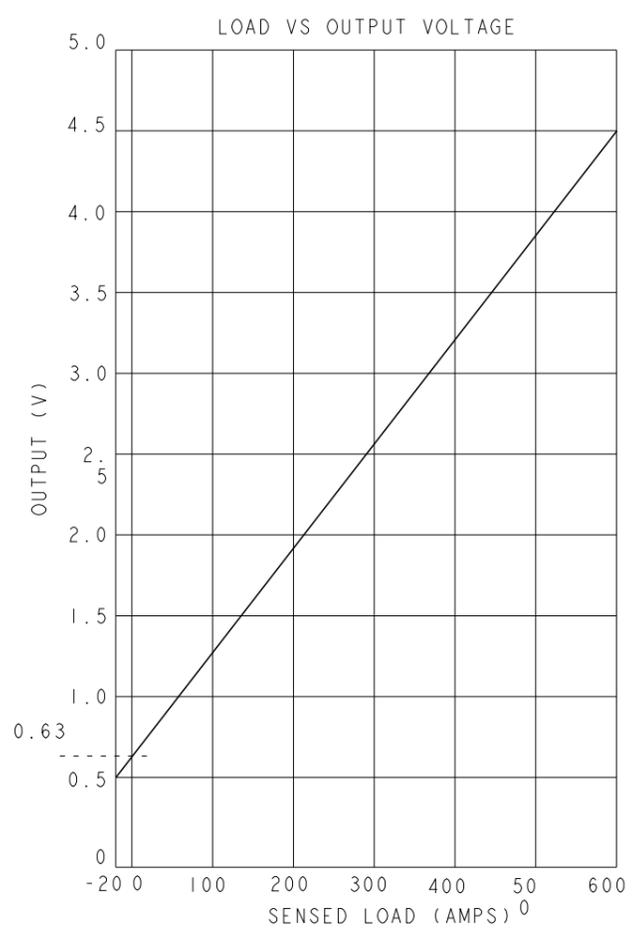
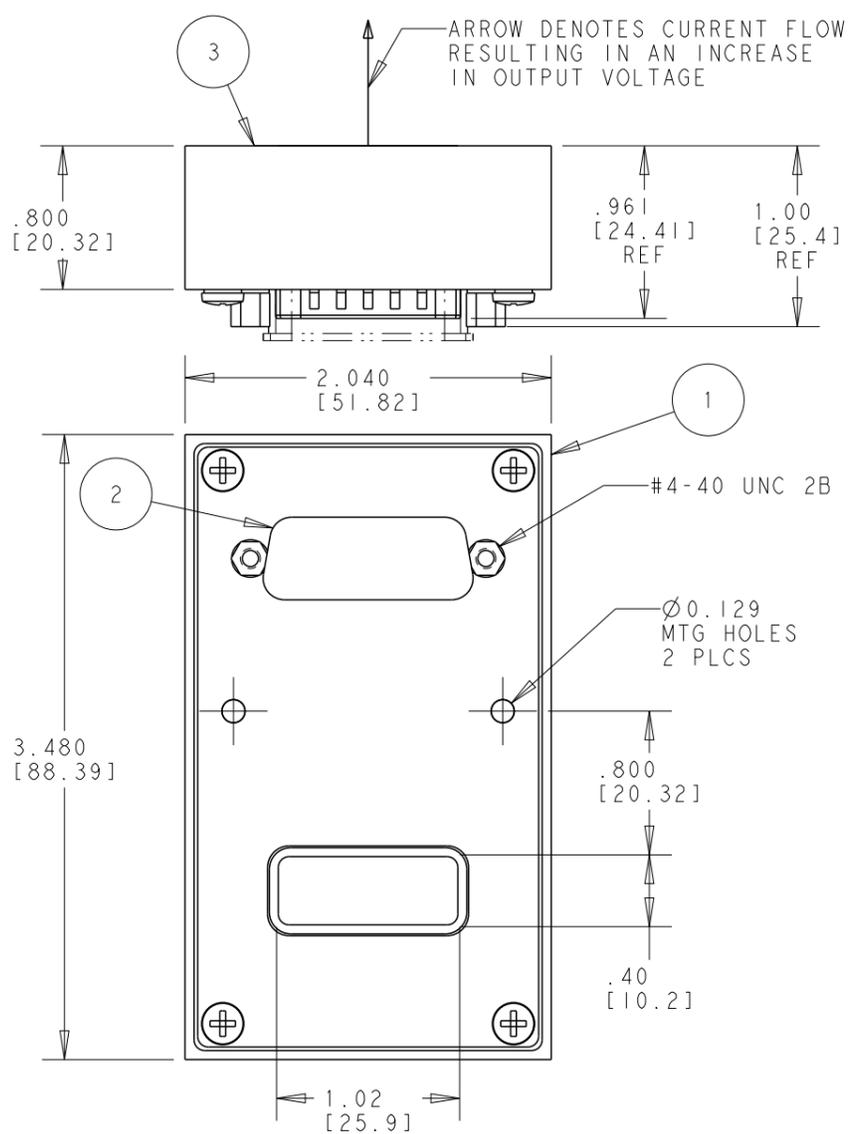


FIGURE 1- CONNECTION DIAGRAM BETWEEN SCS6004K AND EXTERNAL RELAY

POWER SUPPLY:
 SUPPLY VOLTAGE: 16 - 32 VDC
 CURRENT SUPPLY AT 28 VDC: 100mA MAX (EXCLUDES RELAY COIL CURRENT)

ANALOG OUTPUT:
 OUTPUT RANGE : 0.5VDC - 4.5VDC
 SENSED LOAD: -20 AMPS (MIN) TO 600 AMPS (MAX)
 ACCURACY: ±3.5% FULL SCALE
 SENSITIVITY: 6.45 MILLIVOLT/AMP
 OUTPUT TRANSFER FUNCTION:
 $V = (\text{SENSEDLOAD} * \text{SENSITIVITY}) + 0.63$

EXTERNAL RELAY COIL CURRENT SPEC:
 PICK UP CURRENT : 10 AMPS (MAX) FOR 200 mSECS
 HOLD CURRENT : 0.75 AMPS (MAX)

OVERLOAD TRIP RESPONSE:

OVERLOAD TRIP TIMES		
PIN-CONFIGURABLE NOMINAL LOAD SETTINGS	MIN.	MAX.
	100% - 135% OF NOM LOAD	NO TRIP
200% OF NOM LOAD	12 SEC	70 SEC
300% OF NOM LOAD	2.4 SEC	21 SEC
400% OF NOM LOAD	1 SEC	8 SEC
500% OF NOM LOAD	0.5 SEC	5.25 SEC
600% OF NOM LOAD	0.4 SEC	1.61 SEC
800% OF NOM LOAD	0.25 SEC	1.1 SEC
1000% OF NOM LOAD	0.22 SEC	0.9 SEC

REVERSE LOAD DETECTION:
 REVERSE LOAD TRIP LEVEL: -1A TO -20A
 TRIP RESPONSE TIME: 40 mSEC TO 450 mSEC

TRIP STATUS:
 CURRENT SINK (MAX): 35 mA

OVERLOAD DETECTION STATUS:
 CURRENT SINK (MAX): 35 mA

ENVIRONMENTAL/PHYSICAL CHARACTERISTICS
 TEMPERATURE RANGE: -40° TO +85° C
 WEIGHT: 200 GRAMS (MAX)
 ALTITUDE: 50,000 FT.

MEETS DO-160G SPECIFICATION FOR SHOCK, VIBRATION, TEMPERATURE AND ALTITUDE

EMI:
 MEETS DO-160G SPECIFICATION FOR POWER INPUT, VOLTAGE SPIKES, AF CONDUCTED SUSCEPTIBILITY, INDUCED SIGNAL SUSCEPTIBILITY, RF SUSCEPTIBILITY (RADIATED AND CONDUCTED), RF EMISSIONS, INDUCED LIGHTNING AND ESD

JURISDICTION: EXPORT ADMINISTRATION REGULATIONS
 ECCN: EAR99
 MARKING DATE: 10JUL2019
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15-PIN D-SUB PIN ASSIGNMENT		
PIN	FUNCTION	IMPLEMENTATION/DESCRIPTION
1	+28VDC	PRIMARY POWER, HIGH
2	RESET	CYCLE MOMENTARILY TO GND TO RELEASE FROM TRIP MODE. LEAVE OPEN (OR > 14 VOLTS) FOR NORMAL OPERATION.
3	REVERSE LOAD DETECTION DISABLE	CONNECT TO GND TO DISABLE REVERSE LOAD DETECTION FEATURE. LEAVE OPEN (OR > 14 VOLTS) TO ENABLE FEATURE.
4	RELAY COIL CONNECTION	CONNECT TO RELAY COIL. REFER TO FIGURE 1 FOR CONNECTION GUIDANCE.
5	RETURN	PRIMARY POWER, GND
6	400A LOAD SELECT	CONNECT TO GND FOR 400-AMP NOM LOAD; 7 = 8 = OPEN
7	300A LOAD SELECT	CONNECT TO GND FOR 300-AMP NOM LOAD; 6 = 8 = OPEN
8	200A LOAD SELECT	CONNECT TO GND FOR 200-AMP NOM LOAD; 6 = 7 = OPEN
NOTE: ONLY ONE LOAD SELECT PIN CAN BE WIRED UP IN SYSTEM INSTALLATION. THE OTHER TWO MUST REMAIN UN-CONNECTED.		
9	ANALOG OUTPUT	MONITOR UP TO 600 AMP LOAD. REFER TO LOAD VS OUTPUT VOLTAGE GRAPH.
10	TRIP STATUS	HIGH IMPEDANCE = NORMAL MODE 0 V = TRIP MODE
11	OVERLOAD DETECTION FEATURE STATUS	HIGH IMPEDANCE = OVERLOAD DETECTION FEATURE ENABLED 0 V = FEATURE DISABLED NOTE: TO DISABLE FEATURE, SET THE WIRED LOAD SELECT PIN TO OPEN.
12, 13, 14, 15		INTERNALLY CONNECTED TO GND

FIND NO	QTY RECD	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	DRAWING OR SPECIFICATION	FSCM NO	TE PART NO	MATERIAL	HEAT TREAT
3	1	16043-157	NAME PLATE			2252005-8		
2	1	53304-002	CAP-DUST SUB-D			4-1616927-9		
1	1	48374-090	PRIMARY ASSEMBLY			6-2252002-4		

CAGE CODE: 74063
 Hartman Division 175 N. DIAMOND STREET MANSFIELD, OHIO 44902

DIMENSIONS: INCHES [mm]
 TOLERANCES UNLESS OTHERWISE SPECIFIED:
 0 PLC ±
 1 PLC ±
 2 PLC ±.02
 3 PLC ±.005
 4 PLC ±

ANGLES ± 1°
 SURFACE TEXTURE 63

RAJ 18JAN19
 CHK 18JAN19
 DKP 18JAN19
 APVD

NAME SMART CURRENT SENSOR
 SCS6004K

SCALE NONE SIZE A3 DRAWING NO 7-2252003-6 SHEET 1 OF 1 REV C

TE Connectivity

REV	DESCRIPTION	DATE	BY	CHKD
C	ECO-19-010736, ADD ECCN	12JUL2019	RAG	RAG
B	RELEASE TO PROD FROM REV A	14JAN2019	RAJ	RAJ
A	REMOVE PRELIMINARY	03DEC2018	RAG	RAG
LTR	REVISION RECORD		DWN	APVD

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