

MAGNETIC CHARACTERISTICS $\triangle 1$ $\triangle 5$

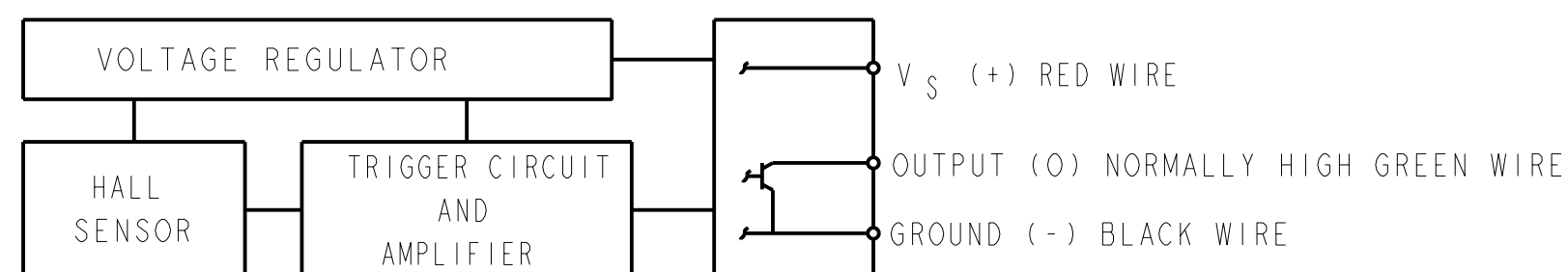
OPERATE MAX	450
RELEASE MIN	170
DIFF MIN	20
(TEMP RANGE -40° C TO 85° C)	

ABSOLUTE MAXIMUM RATINGS $\triangle 9$

SUPPLY VOLTAGE (V_S) $\triangle 7$	-28 VDC TO +28 VDC
VOLTAGE EXTERNALLY APPLIED TO OUTPUT	+28 VOLTS DC MAX WITH SWITCH IN "OFF" CONDITION ONLY -0.5 VOLTS DC MIN WITH SWITCH IN "OFF" OR "ON" CONDITION
OUTPUT CURRENT	20 mA
TEMPERATURE OPERATE AND STORAGE	-40° C TO 125° C
MAGNETIC FLUX	NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE

ELECTRICAL CHARACTERISTICS

	MIN	TYP	MAX	REMARKS
SUPPLY CURRENT $\triangle 4$		8 mA	18 mA	$V_S = 4.5-24$ VOLTS $\triangle 7$
OUTPUT VOLTAGE (OPERATED) $\triangle 5$		0.15 V	0.4 V	SINKING 10 mA PER OUTPUT
OUTPUT LEAKAGE CURRENT (RELEASED) $\triangle 5$			10 μ A	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME				
RISE TIME $\triangle 5$		0.2 μ SEC	1.5 μ SEC	10% TO 90%
FALL TIME		0.1 μ SEC	1.5 μ SEC	90% TO 10%



BLOCK DIAGRAM SHOWING CURRENT SINKING OUTPUTS

NOTES

- $\triangle 1$ FLUX ENTERING THE SOUTH POLE OF THE MAGNET WILL OPERATE THE SENSOR WHEN MAGNET IS POSITIONED AS SHOWN IN FIGURE 2. THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET
- $\triangle 2$ LEADWIRES (INDIVIDUAL WIRES) ARE 24 GAGE STRANDED WITH XLPE INSULATION
- $\triangle 3$ DATE CODE LOCATED IN THIS AREA
- $\triangle 4$ AT $24 \pm 2^\circ$ C
- $\triangle 5$ AT SUPPLY VOLTAGE OF 4.5 TO 24 VOLTS AND FULL TEMPERATURE RANGE
- $\triangle 6$ CATALOG LISTING LOCATED IN THIS AREA
- $\triangle 7$ V_S IS THE UNREGULATED SUPPLY VOLTAGE
- $\triangle 8$ TORQUE ON PLASTIC NUTS MUST NOT EXCEED 12 INCH POUNDS
- $\triangle 9$ ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THAT THE DEVICE WILL WITHSTAND WITHOUT DAMAGE TO THE DEVICE. HOWEVER, THE ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARENTEED AS THE MAXIMUM LIMITS (ABOVE RECOMMENDED OPERATING CONDITIONS) ARE APPROACHED, NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATING



THIRD ANGLE PROJECTION	
SCALE 3:1	
DO NOT SCALE PRINT	
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE	
ONE PLACE (.0)	$\pm .030$
TWO PLACES (.00)	$\pm .015$
THREE PLACES (.000)	$\pm .005$
ANGLES	\pm
WEIGHT	

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	MAGNETICALLY OPERATED CYLINDRICAL HALL SWITCH	CATALOG LISTING
		SR3F-A1A

ISSUE	3
DRAWING NUMBER	SR3F-A1A
REVISIONS	A 201747 JUL NOV00
REPLACES	X93971-SR
RELEASE NO.	PR-19105
CHECK	2MAY91
CHECK	KAG
CHECK	IMAY91
CHECK	JAS
DRAWN	PTC/CAD 2D