

OPERATING CONDITIONS

CONTACT RATING: (AT NOMINAL COIL CURRENT)
 NON-INDUCTIVE LOW LEVEL; 3 AMPERES AT 29 VOLTS DC; 1 AMPERE AT 115 VOLTS AC CASE UNGROUNDED; 0.3 AMPERE AT 115 VOLTS AC CASE GROUNDED-

INITIAL CONTACT RESISTANCE:
 .05 OHMS MAXIMUM

AMBIENT TEMPERATURE:
 -65°C TO +125°C

DIELECTRIC STRENGTH:
 1000 VOLTS RMS AT SEA LEVEL
 500 VOLTS RMS ACROSS OPEN CONTACTS
 350 VOLTS RMS AT 80,000 FEET

INSULATION RESISTANCE:
 1000 MEGOHMS MINIMUM

OPERATE TIME:
 15 MILLISECONDS MAX AT NOMINAL CURRENT

RELEASE TIME:
 10 MILLISECONDS MAX AT NOMINAL CURRENT

ENCLOSURE:
 HERMETICALLY SEALED BY WELDING

TERMINALS:
 0.2 INCH GRID SPACED
 PLUG IN, PRINTED CIRCUIT OR HOOKED
 TYPE SOLDER TERMINALS (SEE PICTORIALS)

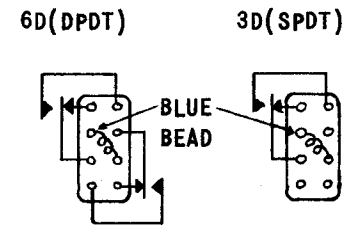
TYPE 3D (25 MILLIWATT SENSITIVITY) SPDT

TMC P/N	DC NOMINAL COIL DATA		MAX PULL-IN MILLIAMPERES	DROP OUT MILLIAMPERES	
	MILLIAMPERES	OHMS*		MAX	MIN
RL178-3D35-0	52.5	20	35.0	17.5	3.5
RL178-3D15.8	23.5	100	15.8	7.9	1.58
RL178-3D 7.2	10.8	500	7.2	3.6	.72
RL178-3D 5.0	7.5	1000	5.0	2.5	.50
RL178-3D 4.1	6.1	1500	4.1	2.0	.41
RL178-3D 3.5	5.2	2000	3.5	1.7	.35
RL178-3D 3.2	4.8	2500	3.2	1.6	.32
RL178-3D 2.2	3.3	5000	2.2	1.1	.22
RL178-3D 1.8	2.7	8000	1.8	.9	.18
RL178-3D 1.6	2.4	10,000	1.6	.8	.16

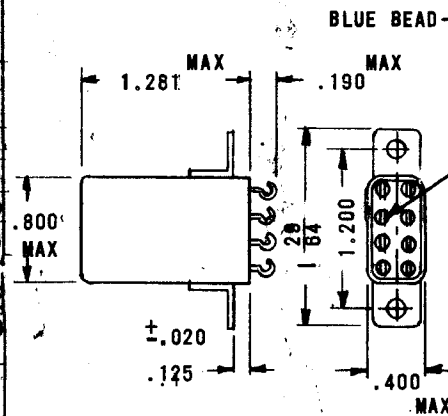
TYPE 6D (40 MILLIWATT SENSITIVITY) DPDT

RL178-6D45.0	67.5	20	45.0	22.5	4.5
RL178-6D20.0	30.0	100	20.0	10.0	2.0
RL178-6D 9.0	13.5	500	9.0	4.5	.9
RL178-6D 6.3	9.4	1000	6.3	3.1	.63
RL178-6D 5.2	7.8	1500	5.2	2.6	.52
RL178-6D 4.5	6.7	2000	4.5	2.2	.45
RL178-6D 4.0	6.0	2500	4.0	2.0	.40
RL178-6D 2.8	4.2	5000	2.8	1.4	.28
RL178-6D 2.3	3.4	8000	2.3	1.1	.23
RL178-6D 2.0	3.0	10,000	2.0	1.0	.20

*DC RESISTANCE STANDARD TOLERANCE ± 10%
 OTHER VALUES OF RESISTANCE FOR DIFFERENT CURRENT RATINGS CAN BE SUPPLIED



CIRCUIT DIAGRAMS UNENERGIZED

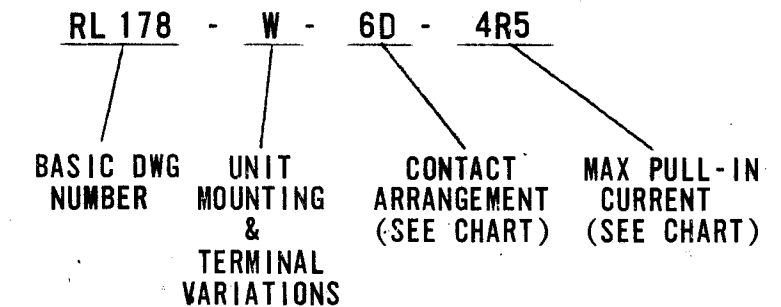


BASIC CASE PICTORIAL

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	E.M.N.NO	DRAFT	CHKD	APPD
	X	EXPERIMENTAL RELEASE	8/12/68		C.V.	JLB	
		ORIG. RELEASE FOR PROD	10-2-68		R.G.		JLB

TMC PART NUMBER WILL BE IN THE FOLLOWING FORM:



UNIT MOUNTING AND TERMINAL VARIATIONS (FOR BASIC DIMENSIONS REFER TO CASE PICTORIAL)

<p>TYPE C</p> <p>MTG: 4-40 STUDS TERMINALS: HOOKED TYPE, SOLDER</p>	<p>TYPE U</p> <p>MTG: .120 DIA 2 HOLES TERMINALS: HOOKED TYPE</p>	<p>TYPE P</p> <p>MTG: .125 DIA 2 HOLES TERMINALS: 3" LONG LEADS</p>	<p>TYPE W</p> <p>MTG: .096 HOLES TERMINALS: HOOKED TYPE, SOLDER</p>									
<p>TYPE O</p> <p>PLUG-IN</p>	<p>TYPE N</p> <p>TERMINAL: PRINTED CIRCUIT APPLICATION</p>	<p>HFRR-4</p> <table border="1"> <thead> <tr> <th>QTY / UNIT</th> <th>MODEL USED ON</th> <th>ASS'Y NO.</th> </tr> </thead> <tbody> <tr> <td></td> <td>APPLICATION</td> <td></td> </tr> <tr> <td></td> <td>CODE</td> <td>S401-227(WJS SERIES)</td> </tr> </tbody> </table> <p>NOTICE TO PERSONS RECEIVING THIS DRAWING THE TECHNICAL MATERIEL CORPORATION claims proprietary right in the material disclosed hereon. This drawing is issued in confidence for engineering information only and may not be reproduced or used to manufacture anything shown hereon without permission from THE TECHNICAL MATERIEL CORPORATION to the user. This drawing is loaned for mutual assistance and is subject to recall at any time.</p>		QTY / UNIT	MODEL USED ON	ASS'Y NO.		APPLICATION			CODE	S401-227(WJS SERIES)
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	CODE	S401-227(WJS SERIES)										

REQ'D	ITEM	PART NUMBER	DESCRIPTION	SYM.
			LIST OF MATERIAL	
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES</p>				
ELECT. DES.		DATE	<p>THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK</p>	
CHECKED		DATE	<p>RELAY, ARMATURE, DC (DPDT & SPDT)</p>	
DRAWN		DATE	SIZE	ISSUE
			B	1
			CODE IDENT. NO.	DWG NO.
			82679	RL 178
			SCALE	SHEET OF