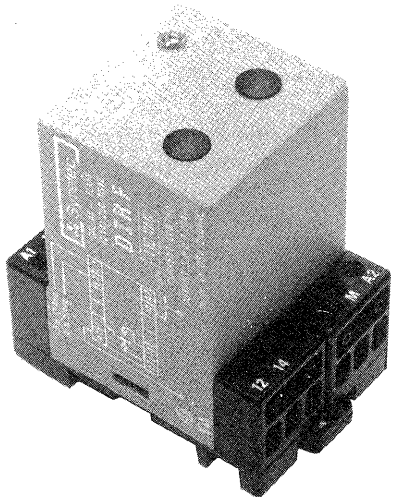
IR.F SERIES

DC FIELD LOSS RELAY



- **Protect Shunt or Compound Wound Motors**
- **Fast Response time - 50 ms on break**
- **Pick Up Currents Available from .1 to 10 Amp.**
- **SPDT 10 Amp. Relay Output**
- **LED Relay Status Indicator**

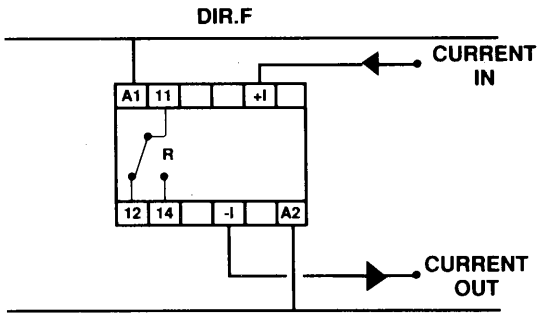
MODE OF OPERATION:

The IR.F Series protects shunt or compound wound motors against overspeeding when an open circuit in the field occurs. The output relay will de-energize when the motor shunt field opens, shutting down the motor when relay contacts are placed in the stop circuit.

SPECIFICATIONS:

Input Power ..... 110 VAC ± 15%, 50/60 Hz
Power Consumption 3VA
Current Range ..... 0.1 to 10 Amps DC
Max Voltage ..... 500 VDC
Repeat Accuracy ..... ±2% at Constant Temperature
Response Time ..... 100 ms On Make
60 ms On Break
Output Relay ..... SPDT Relay
Contact Material ..... AG Cdo
Maximum Load ..... 10 A AC resistive 1A DC inductive
Maximum Switching Voltage ..... 250 VAC 80V DC
Relay Max. Power Rating ..... 2500 VA 30 W
Mechanical Life of Relay ..... 30 x 10^6 operations
Electrical Life of Relay ..... 2 x 10^5 at 2500 VA resistive load
Operating Temperature ..... +14°F to + 140°F - 10°C to + 60°C
Weight ..... 7 oz (200 gr.)

WIRING DIAGRAM:



Max. Field Current (A)	Relay Pick-Up Amps.	Relay Drop-Out Amps.	Input Resistance (Ω)	Max. Permanent Current (A)	Max. Peak Current for 1 sec. (A)
.1	.1	.09	0.1	5	17
.2	.2	.18	0.1	5	17
.3	.3	.27	0.1	5	17
.4	.4	.36	0.1	5	17
.5	.5	.45	0.01	15	55
.6	.6	.54	0.01	15	55
.7	.7	.63	0.01	15	55
.8	.8	.72	0.01	15	55
.9	.9	.81	0.01	15	55
1.0	1.0	.90	0.01	15	55
1.5	1.5	1.35	0.01	15	55
2.0	2.0	1.80	0.01	15	55
2.5	2.5	2.25	0.01	15	55
3.0	3.0	2.70	0.01	15	55
4.0	4.0	3.60	0.01	15	55
5.0	5.0	4.50	0.01	15	55
6.0	6.0	5.40	0.01	15	55
7.0	7.0	6.30	0.01	15	55
8.0	8.0	7.20	0.01	15	55
9.0	9.0	8.10	0.01	15	55
10.0	10.0	9.00	0.01	15	55

ORDERING INFORMATION:

D	IR.F	1.0	110 A
Mounting	Series	Max. Field Current	Input Power

Mounting
D = Din.rail

Series
IR.F

Max. Field Current
1.0 = 1.0 Amp.

Input Power
110A = 110 VAC