

Section 1

General Description

The TCPS Isolation Module Series (comprised of models TCPS-170, TCPS-NEMA and TCPS-IRM) are used to interface MS SEDCO's TC-Series of vehicle and pedestrian sensors with traffic control computers and protect the TC-Series sensors from potential damage caused by power problems inherent to intersections.

Model **TCPS-170** offers a single channel isolation input to 170, 179 and 2070 type controllers, configuring one 12V AC power output capable of operating up to two TC-Series sensors.

Model **TCPS-NEMA** offers a dual channel isolation input to NEMA Rack type controllers, configuring two 12V AC power outputs for operating up to two TC-Series sensors.

Model **TCPS-IRM** offers a single channel isolation input to NEMA Shelf type controllers, configuring one 24V AC power output for operating one TC-Series sensors.

Section 2

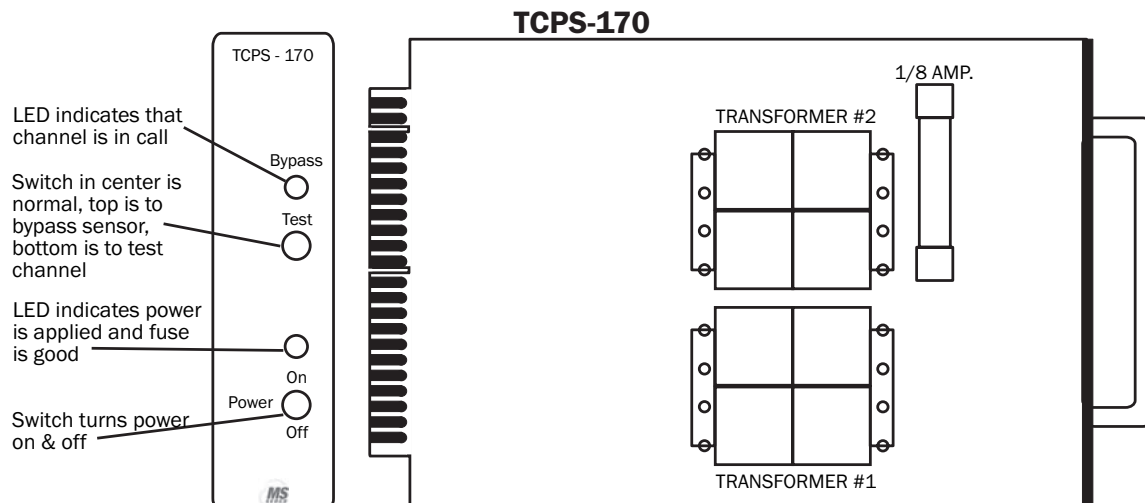
Basic Installation TCPS-170

1. The TCPS-170 is a single channel isolation module with 12V AC output to interface TC-Series sensors with Type 170 or 2070 traffic control computers.
2. When using the TCPS-170 with California version 332 & 336 cabinets, use only slots 1 through 9. When using in a 330 cabinet, all slots can be used.
3. The TCPS-170 supplies enough power for 2 TC-Series sensors.
4. The Bypass/Test switch is normally in the middle position. The Test position momentarily tests the card. Bypass allows a constant call.
5. The Power switch turns power to the TC-Series sensor(s) on or off. If power is on and LED isn't illuminated, check the fuses.
6. The TCPS-170 module requires a slot clearance of 1-1/8".
7. Example slot (1) 1A and 1B will be controller input relay common and normally open. 2A and 2B will be 12V AC output for TC-Series sensor.

TCPS-170 PIN ASSIGNMENTS:

PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
A	DC Ground	J	12V AC for sensor	S	Not Used
B	+24V DC	K	12V AC for sensor	T	Not Used
*	Key (bet B&C)	L	Chassis Ground	U	Not Used
C	Not Used	M	110V AC In	V	Not Used
D	Input #1	*	Key (bet M&N)	W	Not Used
E	Input #1	N	110V AC In	X	Not Used
F	Output #1 (C)	P	Not Used	Y	Not Used
H	Output #1 (E)	R	Not Used	Z	Not Used

* = Key Slots are between B&C and M&N (C) = Collector (E) = Emitter



TCPS Series

Isolation Modules

TCPS-NEMA

INSTALLATION INSTRUCTIONS

Section 1

General Description

The TCPS Isolation Module Series (comprised of models TCPS-170, TCPS-NEMA and TCPS-IRM) are used to interface MS SEDCO's TC-Series of vehicle and pedestrian sensors with traffic control computers and protect the TC-Series sensors from potential damage caused by power problems inherent to intersections.

Model **TCPS-170** offers a single channel isolation input to 170, 179 and 2070 type controllers, configuring one 12V AC power output capable of operating up to two TC-Series sensors.

Model **TCPS-NEMA** offers a dual channel isolation input to NEMA Rack type controllers, configuring two 12V AC power outputs for operating up to two TC-Series sensors.

Model **TCPS-IRM** offers a single channel isolation input to NEMA Shelf type controllers, configuring one 24V AC power output for operating one TC-Series sensors.

Section 2

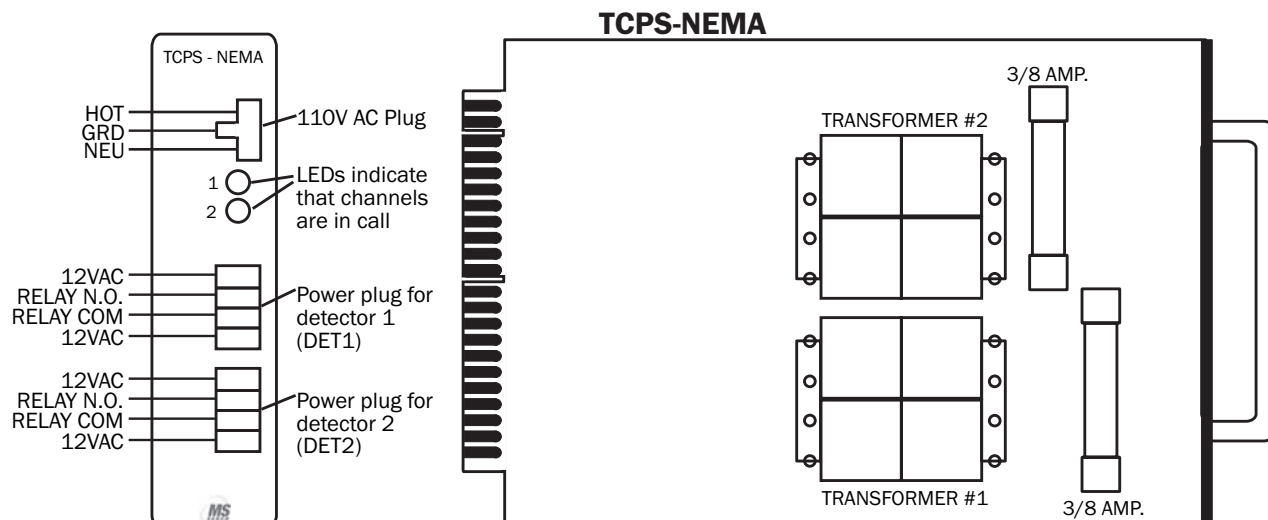
Basic Installation

1. The TCPS-NEMA is a dual channel isolation module with two 12V AC outputs to interface TC-Series sensors with NEMA Rack type traffic control computers.
2. The TCPS-NEMA supplies enough power for 2 TC-Series sensors.
3. Power is provided to the TCPS-NEMA module with an AC wire harness (included).
4. The TCPS-NEMA module requires a slot clearance of 1-1/8".
5. Example slot (1) 1A and 1B will be controller input relay common and normally open.
2A and 2B will be 12V AC output to TC-Series sensor.

TCPS-NEMA PIN ASSIGNMENTS:

PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
A	Logic Ground	K	Channel 2 Loop Input	U	Not Used
B	Sensor Unit DC Supply	L	Chassis Ground	V	Not Used
*	Key (between B&C)	M	Reserved (AC Neutral)	W	(+) Channel Output 2
C	External Reset	*	Key (between M&N)	X	(-) Channel Output 2
D	Channel 1 Loop Input	N	Reserved (AC Line)	Y	Not Used
E	Channel 1 Loop Input	P	Not Used	Z	Not Used
F	Channel 1 Output (+)	R	Not Used		
H	Channel 1 Output (-)	S	Not Used		
J	Channel 2 Loop Input	T	Not Used		

* = Key Slots are between B&C; M&N (C) = Collector (E) = Emitter



Section 1

General Description

The TCPS Isolation Module Series (comprised of models TCPS-170, TCPS-NEMA and TCPS-IRM) are used to interface MS SEDCO's TC-Series of vehicle and pedestrian sensors with traffic control computers and protect the TC-Series sensors from potential damage caused by power problems inherent to intersections.

Model **TCPS-170** offers a single channel isolation input to 170, 179 and 2070 type controllers, configuring one 12V AC power output capable of operating up to two TC-Series sensors.

Model **TCPS-NEMA** offers a dual channel isolation input to NEMA Rack type controllers, configuring two 12V AC power outputs for operating up to two TC-Series sensors.

Model **TCPS-IRM** offers a single channel isolation input to NEMA Shelf type controllers, configuring one 24V AC power output for operating one TC-Series sensor.

Section 2

Basic Installation

1. The TCPS-IRM is a single channel isolation module with a single output to interface TC-Series sensors with NEMA Shelf type traffic control computers.
2. The TCPS-IRM supplies enough power for one TC-Series sensor.
3. Drill four holes in the plastic mounting plate in the desired location and attach the TCPS-IRM inside the cabinet.
4. Attach the wires from the TC-Series sensor to Terminal Block TB1 per Figure 1 below.
5. Attach 110V AC power to the power input Terminal Block per Figure 1 below.

FIGURE 1

TRANSFORMER

RATING: 120V AC/60Hz In
24V AC Out
1 Amp

RELAY RATING: Coil = 24V AC
Contacts = 115V, 15

