

Isolated Alarm Contact Kit PA-292891 For Standby Generators with Dec-3 Controllers

The Kohler Alarm Contact Kit activates warning devices and other customer provided accessories to allow monitoring of the standby system from a location remote from the generator set. Lamps, audible alarms, and other devices may be connected to five generator functions selected by the customer. Accessories are typically connected to the set's overspeed, overcrank, high engine temperature, low oil pressure, and low water temperature functions. See Figure 1. Use the alarm contact kit as an alternate or in conjunction with the Decision Monitor annunciator panel.

NOTE

A total of three isolated alarm contact kits may be connected to the Dec-3 Microcomputer Controller.

Customer provided accessories require their own electrical source and must not exceed the relay contact ratings given below.

Relay Contact Rating

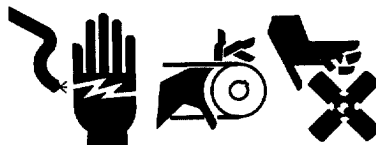
Maximum Switching Voltage	250 Volts AC
Maximum Switching Current	5 Amps.
Minimum Switching Power	100 Microamps.
	10 Volts DC

NOTE

Applicable local, state, and national electrical codes must be observed when installing the alarm contact kit and related accessories.

WARNING

Accidental starting can cause death or serious personal injury. Turn Generator Master Switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.



Mounting

The dry contact kit should be mounted on the generator and connected to the controller or connection box (if used) by the 26 in. (66 cm) wiring harness provided. (Mounting hardware is not included with the kit.) Use of a connection box is recommended to allow easy connection and disconnection of generator accessories.

Electrical Connections

Connect the alarm contact kit according to the wiring diagram shown in Figure 1. Controller/junction box terminals 2 (ground) and 42A (battery voltage) must be connected to the alarm contact terminal strip to provide an electrical source to operate the K1-K5 relays. The customer then has a choice of up to five functions (typical functions are indicated on the wiring diagram). Customer provided devices connected to the alarm contact kit must be furnished with an electrical supply adequate to operate the device. Check the electrical requirements of customer provided accessories prior to installation. Use 18 or 20 gauge stranded wire to connect customer provided accessories to the alarm contact terminal strip.

When a generator fault condition occurs, the contact kit relay (K1-K5) tied to that function is energized. The customer has the option of selecting normally-open or normally-closed contacts from each relay depending upon application requirements. Devices that are to be activated whenever the generator is running are normally connected to relay normally-closed contacts. Devices that are to be activated when the generator has stopped are usually wired to the normally-open relay contacts.

NOTE

The electrical supply furnished to customer provided alarm devices must be a minimum of 100 microamps/10 Volts DC.

CONTROLLER TERMINAL IDENTIFICATION

Terminal ID	Description	
*ESR	Emergency—Stop Relay (K4) Common Contact	Standard Controller
*ESR	Emergency—Stop Relay (K4) N/O Contact	
42A	Battery Voltage (Fuse Protected)	
2	Ground	
3	Remote Start Ground	
4	Remote Start (Active Low)	
9	Crank Mode (Open=Cycle, Ground=Continuous)	
12	Overcrank Indicator	
26	Auxiliary Indicator	
32	Common Fault Line	
36	High Engine Temperature Indicator	
38	Low Oil Pressure Indicator	
39	Overspeed Indicator	
60	System Ready Indicator	
80	Not In Auto Indicator	
35	Low Water Temperature	Pre-Alarm Function
40	Pre-Alarm High Engine Temperature Indicator	
41	Pre-Alarm Low Oil Pressure Indicator	
58	Line Power	Transfer Switch Option Additions
59	Generator Pr	
1	Emergency—Stop Relay (K4) Ground	NFPA Option Additions
1A	Emergency—Stop Relay (K4) Negative	
48	Emergency—Stop Indicator	
61	Battery Charger Fault (Active Low)	
62	Low Battery Volts (Active Low)	
63	Low Fuel (Active Low)	

*Must Have Jumper If No Emergency Stop Relay (K4) Is On Controller Board.

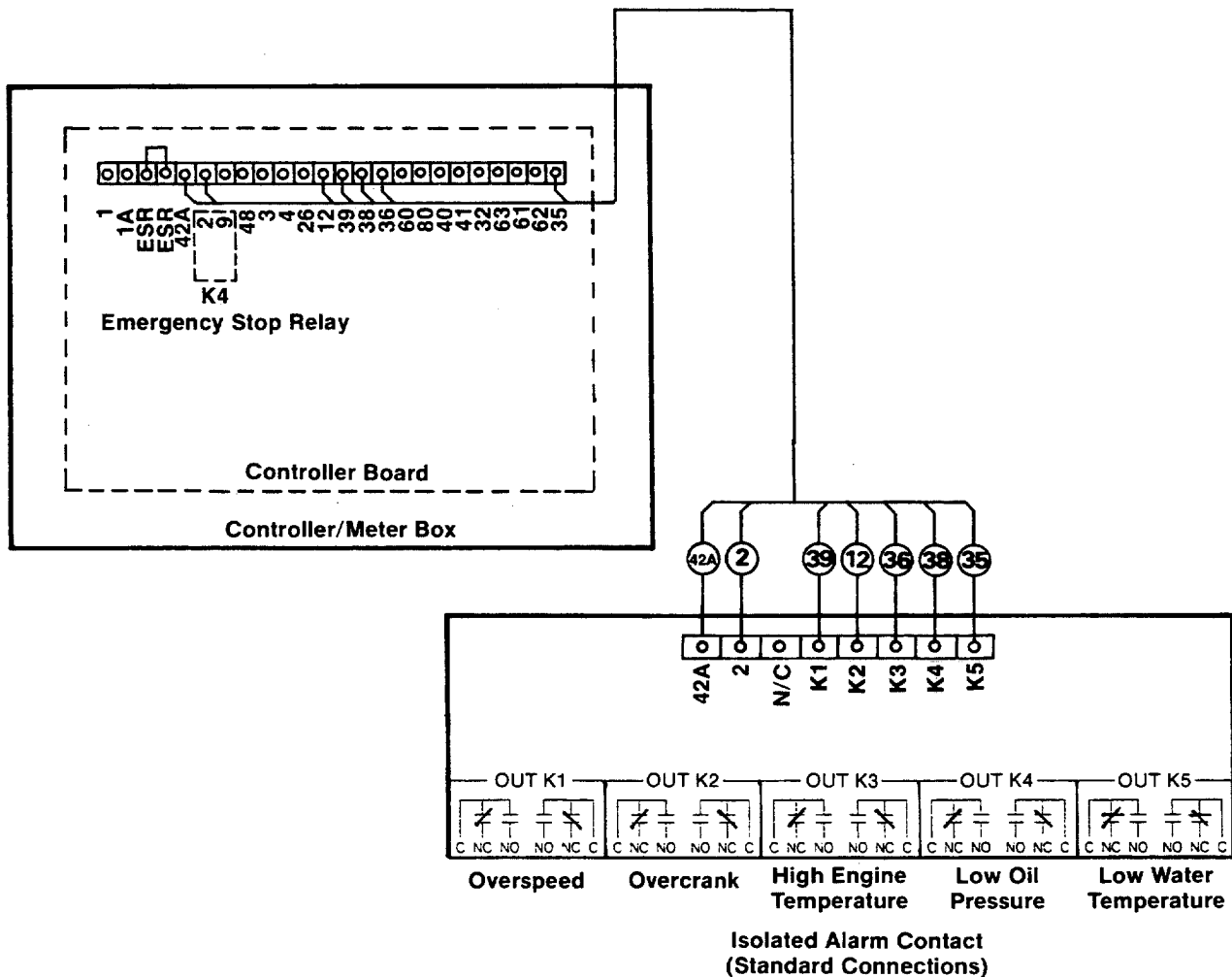
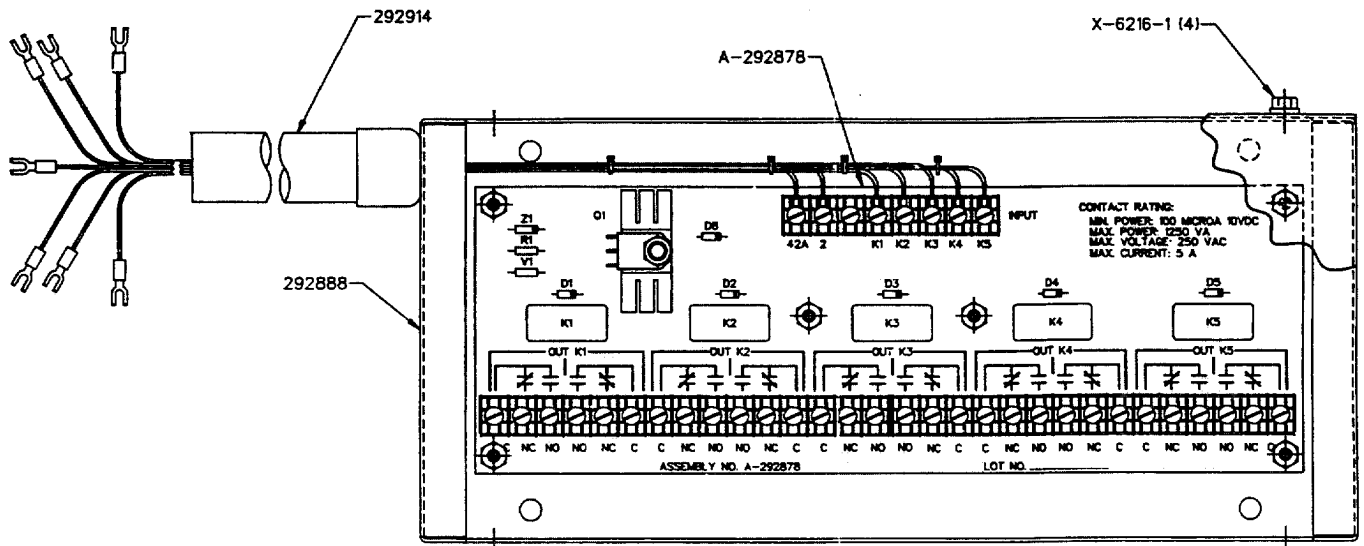


Figure 1. Alarm Contact Kit Wiring

Parts Listing

Description	Qty.	Part No.
Contact Assy. (includes *)	1	A-292890
* Board Assy., circuit	1	A-292878
* Screw, phil. hex. 10-24 x 1/2	4	X-6216-1
* Nut, hex 8-32	6	X-72-4
* Spacer	6	X-712-9
* Box, dry contact	1	292888
* Cover, dry contact	1	292889
* Harness, wiring	1	292914



Isolated Alarm Contact Kit
13 in. (L) x 5.9 in. (W) x 1.95 in. (H)
(33.02 cm x 14.98 cm x 4.95 cm)

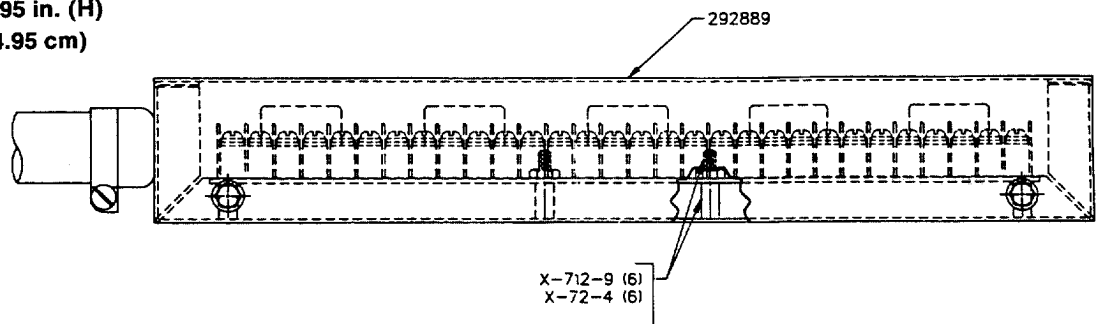


Figure 2. Isolated Alarm Contact Kit