### INSTALLATION INSTRUCTIONS

Original Issue Date: 4/08

Model: Model RDT ATS

Market: **ATS** 

Subject: Auxiliary Switch Kit GM29856-KP1

## Introduction

Optional auxiliary switches provide position-indicating contacts for connection to customer-supplied alarms, remote indicators, or other devices.

The auxiliary switches are located on the right side of the contactor. See Figure 1. See Figure 2 for the contact rating.

The auxiliary switch kit includes two switches. Each switch provides one set of normally open (NO) contacts that close when the switch is activated. See Figure 3.

The auxiliary switches may have a second set of normally closed (NC) contacts that open when the switch is activated. If the NC terminal is present as shown in Figure 4, the NC contact can be used for connection to customer equipment if a normally closed contact is appropriate for the application.

Read the entire installation procedure and compare the kit parts with the parts list at the end of this publication before beginning installation. Perform the steps in the order shown. Also refer to the instructions provided with the customer-supplied equipment that is being connected to the switch.

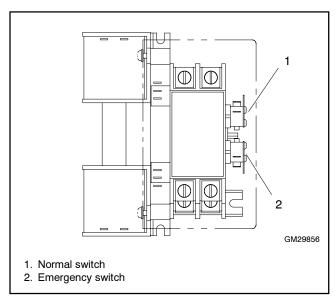


Figure 1 Auxiliary Switches

Description	Contact Rating	
Auxiliary Contacts	15 A @ 277 VAC Form C	

Figure 2 Auxiliary Contact Rating

	ATS Position			
	Normal		Emergency	
Auxiliary Switch	NO	NC *	NO	NC *
Normal switch	Closed	Open	Open	Closed
Emergency switch	Open	Closed	Closed	Open
* If equipped				

Figure 3 Auxiliary Switch Contact Operation

# **Safety Precautions**

Observe the following safety precautions while installing the kit.



# Accidental starting. Can cause severe injury or death.

Disconnect the battery cables before working on the generator set. Remove the negative (-) lead first when disconnecting the battery. Reconnect the negative (-) lead last when reconnecting the battery.

Disabling the generator set. Accidental starting can cause severe injury or death. Before working on the generator set or connected equipment, disable the generator set as follows: (1) Move the generator set master switch to the OFF position. (2) Disconnect the power to the battery charger. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent starting of the generator set by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer.



Hazardous voltage. Will cause severe injury or death.

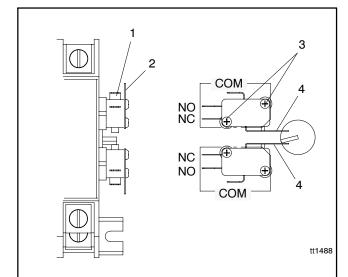
Disconnect all power sources before opening the enclosure.

Grounding electrical equipment. Hazardous voltage can cause severe injury or death. Electrocution is possible whenever electricity is present. Ensure you comply with all applicable codes and standards. Electrically ground the generator set, transfer switch, and related equipment and electrical circuits. Turn off the main circuit breakers of all power sources before servicing the equipment. Never contact electrical leads or appliances when standing in water or on wet ground because these conditions increase the risk of electrocution.

### Installation Procedure

- 1. Place the generator set master switch in the OFF position.
- 2. Disconnect the power to the battery charger.
- 3. Disconnect the generator set engine starting battery(ies), negative (-) lead first.
- 4. Disconnect power to the transfer switch.
- 5. Open the enclosure door and identify the mounting location for the auxiliary contacts on the right side of the contactor. See Figure 1.
- See Figure 4. Mount the auxiliary switch (362081) and insulator (362203) using two mounting screws (X-49-41), as shown in Figure 4. Do not overtighten the screws.
- 7. Mount the second auxiliary switch (362081) and insulator (362203) using two mounting screws (X-49-41), as shown in Figure 4.
- Connect an ohmmeter or test lamp across the NO and COM contact terminals. See Figure 1.
- Manually operate the transfer switch and verify that the switch is actuated when the contactor is in the corresponding (normal or emergency) position and not actuated otherwise.
- 10. Repeat steps 8 and 9 for the second switch.
- 11. Use 1/4 in. fast-on connectors to connect customer-supplied equipment to the contact

- terminals as required for the application. Refer to the instructions provided with the customersupplied equipment.
- Close and secure the transfer switch enclosure door.
- 13. Reconnect power to the transfer switch.
- 14. Check that the generator set master switch is in the OFF position.
- 15. Reconnect the generator set engine starting battery, negative (-) lead last.
- 16. Reconnect power to the battery charger.



Note: Auxiliary switches are equipped with one set of normally open (NO) contacts. A second set of normally closed (NC) contacts may also be provided on some switches as shown.

- 1. Switch (362081)
- 2. Insulation (362203)
- 3. Mounting screws X-49-41 (2 per switch)
- 4. Switch actuator

Figure 4 Auxiliary Switch Installation

### **Parts List**

#### Switch, Auxiliary

Kit: GM29856-KP1				
Qty.	Description	<b>Part Number</b>		
2	Switch, contactor aux.	362081		
	Insulator, cont. auxiliary switch.	362203		
1	Dwg, Assy Auxiliary Switch	GM29856		
4	Screw, Machine	X-49-41		

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