

## LVD relay retrofit kit

MTS 2 enclosures Rev. 1.2

# **Dantherm**® Control your climate





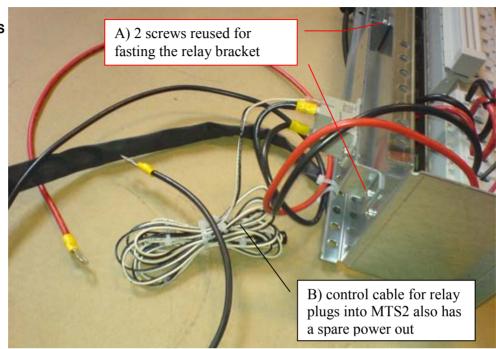
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## Short description of LVD relay retrofit kit installation

What does this instruction cover	A quick reference for installation of LVD relay retrofit kit (Dantherm P/N 040680) for MTS2 . The LVD relay retrofit can be used in a "indoor" Installation of MTS 2 but is also
	designed to fit the MTS 2 outdoor cabinet.
Item description	Compact power relay on mounting bracket with cabling for enabling a low voltage disconnection option of batteries connected to a MTS2 backup system.
Relay connection	To DC MAIN circuit breaker
in diagram	
(LVD W9A1)	LVD W9A1
	ATTC Small Size Case ATTC Case Final Size Case of Instantian for more call imperature of 153°C
	Priver Suppry Meeh UL873 & UL508
	+   - +   - +   - +   - +   -   -   - +   -   -
	E1.1 E1.2 E1.3 E1.4 Range Mounting
	30 Amp Rating
	48 VDC
Tools needed	A long neck PZ2 and T20 screwdriver and spanner tool for battery terminals, and
	cutting tool
	Relay has quick connect tab terminals, but will need two screws to be installed (flange).
BOM of kit:	Magnecraft relay W9AS1D52-24
	COIL TERMINALS ARE 2.94
	CONTACT TERMINALS ARE
	<ul> <li>Bracket for quick connection to Power distribution</li> <li>Control cable for LVD relay</li> </ul>
	<ul> <li>Jumper cable, black AWG10 for connecting MCB to relay</li> </ul>
	<ul> <li>Battery cable, Black AWG 10, Ø8 ring terminal and 6,3mm quick connect terminal</li> </ul>
	<ul> <li>Battery cable, Red, AWG10, Ø8 ring terminal and 6,3 mm quick connect</li> </ul>
	terminal
	3 strips for securing cable and spare screw for securing bracket.
	This instruction.



Retrofit kit installation on MTS 2 outdoor cabinet.



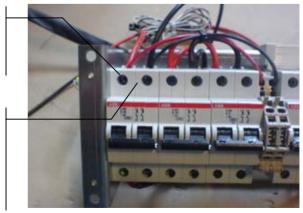
#### Step by step

 Disconnect power to the power distribution board (Also battery cables if installed)
 Warning : Working on live system is hazardous, switch off power!

- 2. Remove cover of the power distribution board by
- Fit the relay on bracket to the back on the power distribution board by unscrewing the 2 screws and, fitting the bracket and tighting the screws. (spare screw comes with package) (figure A on photo above)
- 4. remove existing battery cables at the DC main circuit breaker (25A) to the left on the power distribution board

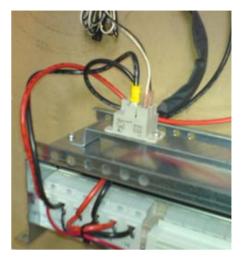
5. Replace red wire with included one with M8 ring terminals. Tighten screw carefully (8 Nm)

6. Replace black wire with the short black wire included in kit (fast on terminal goes into relay (COM) Tighten screw carefully (8 Nm)



7. Plug the fast on terminals to the relay.

Notice the narrow terminals on the relay coil (to the right on the picture).



8. Connect the battery terminals to the batteries, and secure the cables so it does not get damaged or cut on any edges.

#### Warning: carefully not to short circuit the battery poles.

- 9. Route and secure the control cable along the cabinet sides (follow DC power Line) and plug into MTS2, ATTC port on PSU
- 10. Check if the wires on the power distribution board are tightened properly.
- 10. Put Power distribution panel cover back on and tighten the four screws
- 11. Switch power on
- 12. Check if the relay is engaged, when MTS 2 is powered up.

### Dantherm Air Handling A/S

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