

smar
FIRST IN FIELDBUS

DF24

FEB / 01
DF24
VERSION 2.0

INSTALLATION MANUAL

DISCRETE OUTPUT MODULE



smar

web: www.smar.com

**Specifications and information are subject to change without notice.
For the latest updates, please visit the SMAR website above.**

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AVOIDING ELECTROSTATIC DISCHARGES



ATTENTION

Electrostatic discharges may damage semiconductors electronics components found in the boards. Generally, they may occur when these components or connectors pins in the modules and racks are touch, without using any appropriated equipment to prevent the electrostatic discharges.

It is extremely recommendable the following procedures:

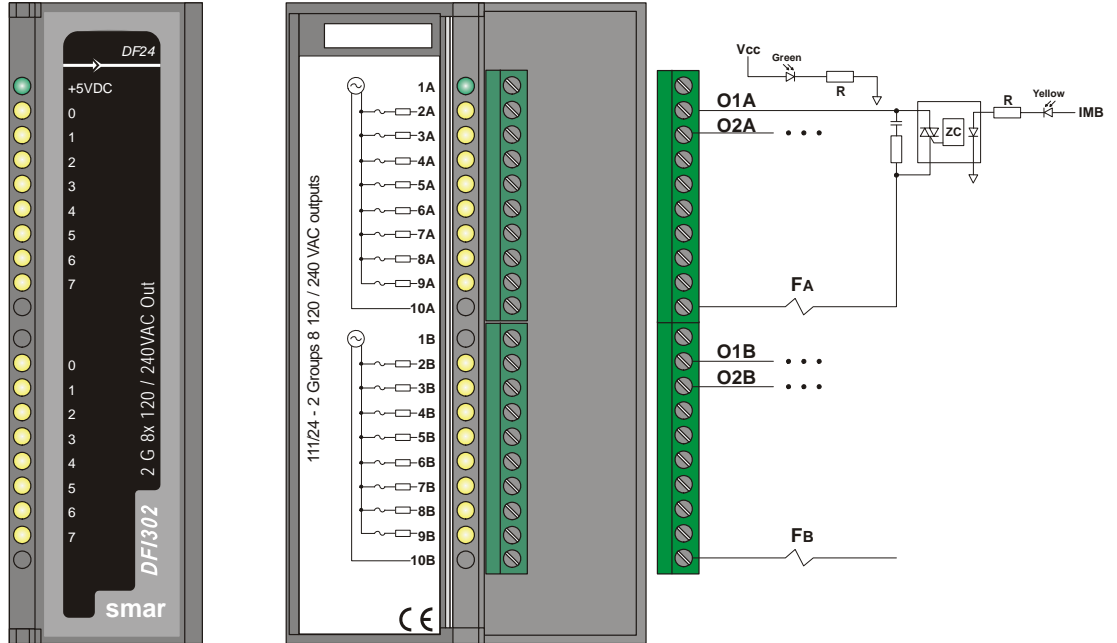
- Before handling the modules and racks, discharge the electrostatic charge found in the body through appropriated equipments or even touching grounded equipments;
- Avoid touching in the electronics components or in the connectors pins in the racks and modules.

DF24 – AC DISCRETE OUTPUT MODULE

DF24 (2 Isolated Groups of 8 240 Vac Outputs)

Description

This module is designed to drive relays, pilot lamps, valves and other loads up to 1A per output. It has 2 optically isolated groups of 8 outputs. These outputs are able to switch any voltage from 20 to 240 Vac.



Technical Specifications

ARCHITECTURE	
Number of Outputs	16
Number of Groups	2
Number of Points per Group	8

ISOLATION	
Groups are individually isolated	
Optical Isolation up to	2500 Vac

EXTERNAL POWER	
Voltage Source for outputs	20 to 240 Vac, 45 to 65 Hz
Maximum consumption per group	4 A
Power Supply Indicator	None
Protection	One fuse per group

INTERNAL POWER	
Provided by the IMB bus	5 Vdc @ 115 mA Maximum
Total Maximum Dissipation	0.575 W
Power Supply Indicator	Green LED

OUTPUTS	
Voltage Output	20 to 240 Vac, 45-65 Hz
Maximum Current per Output	1 A
Maximum Total Current per Group	4 A @ T _{amb} 0-40 °C (32-104 °F) 2 A @ T _{amb} 40-60 °C (104-140 °F)
Maximum Surge Current	15 A / 0.5 cycle, 1 surge per minute maximum
Status display	Yellow LED
Indicator Logic	When Active
Off state Voltage Leakage current	500 µA @ 100 Vac
On state voltage drop	1.5 Vac rms Maximum
Over Load Protection per Output	Should be provided externally (fast acting fuse rated at 1.5 times user rated current)

SWITCHING INFORMATION	
Zero cross operation; Ton, Toff	1/2 cycle
RC Protection Circuit	62 Ω in series with 0.01 µF

DIMENSIONS AND WEIGHT	
Dimensions (W x D x H)	39.9 x 137.0 x 141.5 mm ; (1.57 x 5.39 x 5.57 in)
Weight	0.330 kg

CABLES	
One wire	14 AWG (2 mm ²)
Two wires	20 AWG (0.5 mm ²)

