

DWS-SWITCH-MONO

INSTALLATION MANUAL



AC Power Disconnector and Distributor

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See www.patents.datalogic.com for patent list.

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PREFACE

ABOUT THIS MANUAL

This Instruction Manual is provided for users seeking advanced technical information, including installation, connections, maintenance and specifications.

Manual Conventions

The symbols listed below are used in this manual to notify the reader of key issues or procedures that must be observed:



NOTE: This symbol draws attention to important details or procedures that must be followed for the correct installation of the product.



INFORMATION: This symbol used on the label, refers the user to information contained in this manual.



CAUTION: This symbol identifies a hazard or procedure that, if incorrectly performed, may cause personal injury or result in equipment damage. Operations carrying this symbol must be performed by qualified personnel only.



HIGH VOLTAGE: This symbol alerts the user they are about to perform an action involving, either a dangerous level of voltage, or to warn against an action that could result in damage to devices or electrical shock.

TECHNICAL SUPPORT

Support Through the Website

Datalogic provides several services as well as technical support through its website. Log on to (www.datalogic.com).

For quick access, from the home page click on the search icon 🔍, and type in the name of the product you're looking for. This allows you access to download Data Sheets, Manuals, Software & Utilities, and Drawings.

Hover over the Support & Service menu for access to Services and Technical Support.

Reseller Technical Support

An excellent source for technical assistance and information is an authorized Datalogic reseller. A reseller is acquainted with specific types of businesses, application software, and computer systems and can provide individualized assistance.

SAFETY REGULATIONS

Electrical Safety

This product conforms to the applicable requirements contained in the following European Standards:

- EN 61439-1
- EN 60204-1

Product Label

The Product data label is located on the outside door panel.

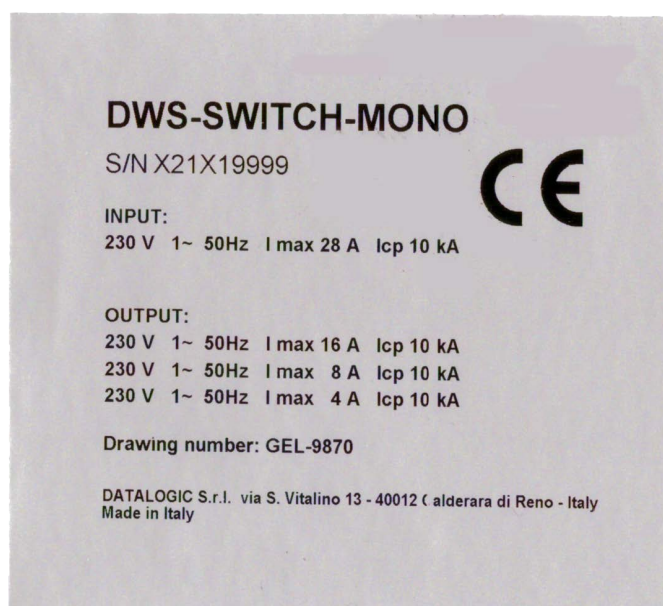


Figure 1 - Product Data Label

CE Compliance

CE marking states the compliance of the product with essential requirements listed in the applicable European directive. Since the directives and applicable standards are subject to continuous updates, and since Datalogic promptly adopts these updates, therefore the EU declaration of conformity is a living document. The EU declaration of conformity is available for competent authorities and customers through Datalogic commercial reference contacts. Since April 20th, 2016 the main European directives applicable to Datalogic products require inclusion of an adequate analysis and assessment of the risk(s). This evaluation was carried out in relation to the applicable points of the standards listed in the Declaration of Conformity. Datalogic products are mainly designed for integration purposes into more complex systems. For this reason, it is under the responsibility of the system integrator to do a new risk assessment regarding the final installation.

GENERAL VIEW

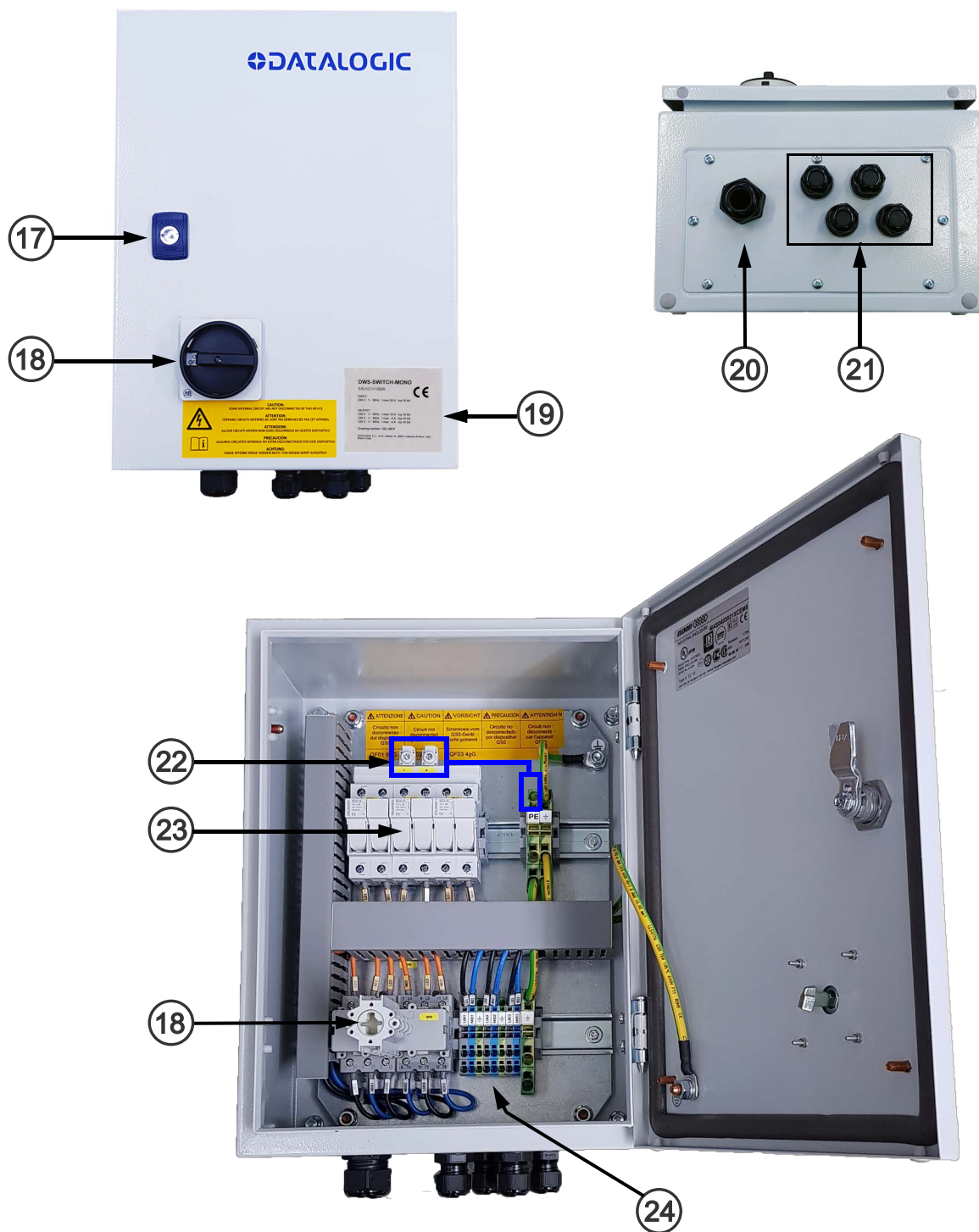


Figure 2 - DWS-SWITCH-MONO General View

- | | |
|--|--|
| 1 Key Lock | 5 AC Output Cable Compression Connectors |
| 2 Main Switch | 6 AC Line Input Terminals and Protection Earth |
| 3 Product Data Label | 7 AC Line Fuses |
| 4 AC Input Cable Compression Connector | 8 AC Line Output Terminal Block |

CHAPTER 1

INTRODUCTION

The DWS-SWITCH-MONO is an AC Power Disconnect and Distributor cabinet that can be used as first functional block in Dimensioning, Weighting and Barcode Scanning (DWS) systems.

This document describes the DWS-SWITCH-MONO used to power a system composed of four electrical loads: a Datalogic PWR-480W electrical panel, a Scale (digital section), a Datalogic PWR-2400 electrical panel and a Datalogic PWR-480B, PWR-240B; or PWR-120 electrical panel.



CAUTION: Read all information in this manual before installation, paying particular attention to all Caution and Warning notes.

The following chapter can be used as a checklist to verify all the steps necessary to complete installation of the DWS-SWITCH-MONO.

CHAPTER 2

INSTALLATION

CABINET MOUNTING

The cabinet must be mounted to the reading station frame using the brackets and bolts provided in the package

1. Mount the bracket to the cabinet.
2. Mount the cabinet to the frame.



Figure 3 - Mounting Brackets



IMPORTANT: The cabinet must be installed vertically in such a way that the main switch is no higher than 1.90 m from the ground (see Figure below).

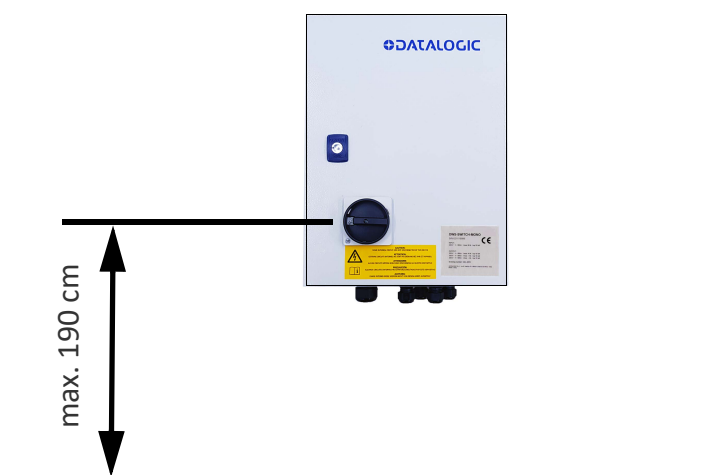


Figure 4 - DWS-SWITCH-MONO cabinet max. height

Please note that the cabinet door can be unlocked and opened by using the key provided along with the product



HIGH VOLTAGE: When the main switch is in the OFF position, the outputs #1, #2, and #3 are disconnected, but not the AC Line Input Terminals!

SYSTEM WIRING: AC OUTPUT

System Wiring: OUT#1 and OUT#2

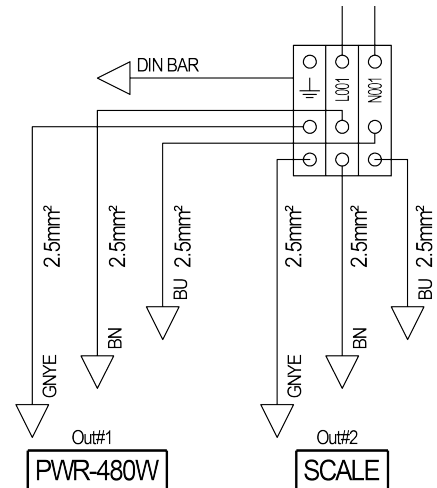


Figure 5 - Terminal Block for Out#1 and Out#2

The terminal block for Out#1 (PWR-480W) and for Out#2 (Scale) is highlighted in the picture above.

Use cables 3 X yy mm², where "yy" is a value between 2.5 - 4 mm².

Out#1 and Out#2 are protected by Fuse QF01, 8A gG.

System Wiring: OUT#3

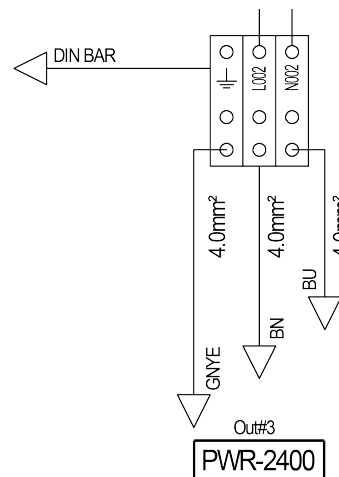
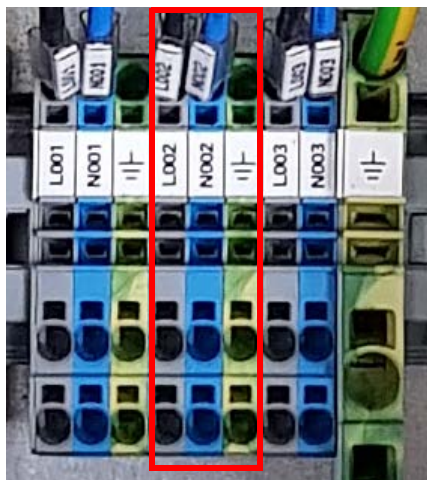


Figure 6 - Terminal Block for Out#3

The terminal block for Out#3 (PWR-2400) is highlighted in the picture above. Use cables 3 X yy mm², where "yy" is a value between 2.5 - 4 mm².

Out#3 is protected by Fuse QF02, 16A gG.

System Wiring: OUT#4

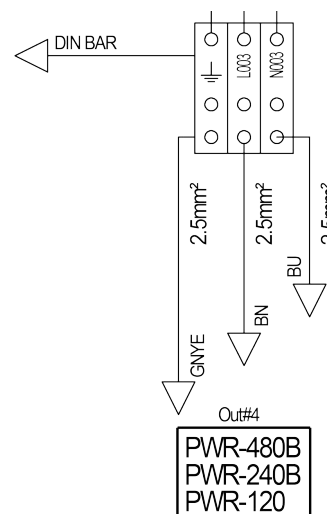
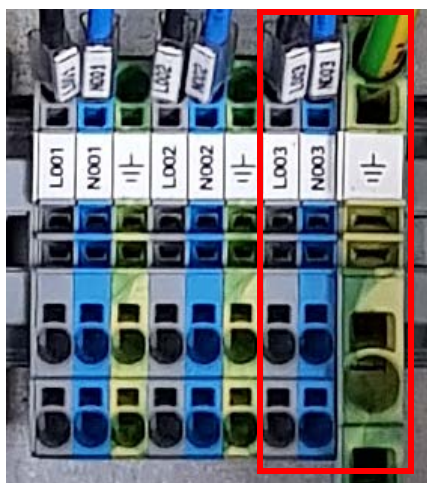


Figure 7 - Terminal Block for Out#4

The terminal block for Out#4 (PWR-480B or PWR-240B or PWR-120) is highlighted in the picture above. Use cables 3 X yy mm², where "yy" is a value between 2.5 - 4 mm².

Out#4 is protected by Fuse QF03, 4A gG.



CAUTION: Output cables can be max. 12 m long.



NOTE: When not used, keep the compression connectors sealed with their appropriate plugs.

SYSTEM WIRING: AC INPUT



CAUTION: The connection of DWS-SWITCH-MONO AC Input must be performed by qualified personnel only.

Vac Input lines must be wired from the bottom side of the cabinet.

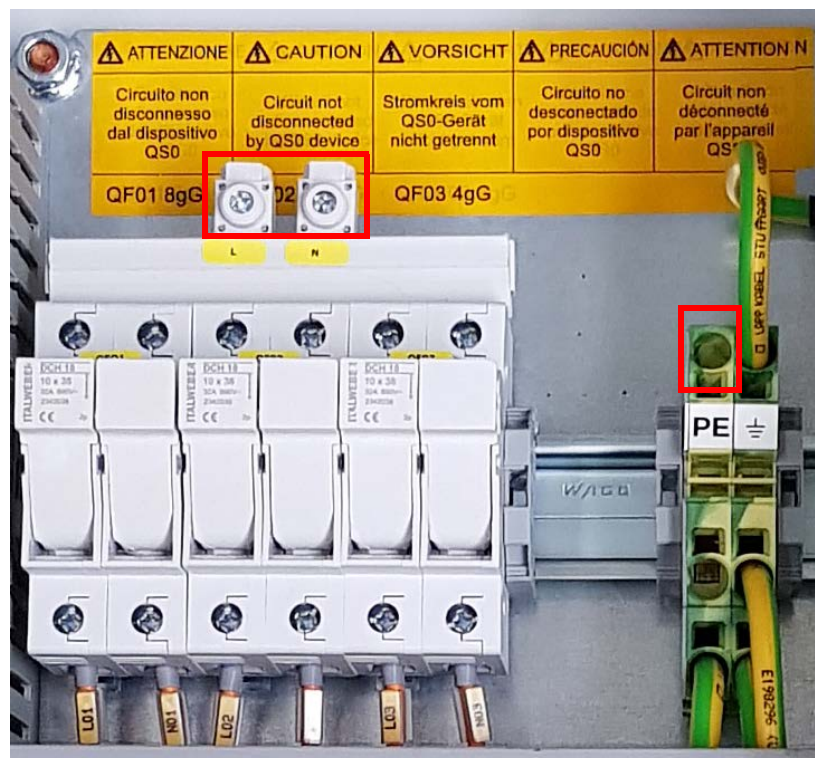


Figure 8 - AC Input cable entry

The Cable Entry Compression Connector has protection capability of IP65.

For external 230 Vac power supply to the DWS-SWITCH-MONO use a 3-conductor cable with size of 4 mm².

Follow the procedure below to wire the AC input line.



1. Connect the L line to the L pole of the bar placed on the fuses block.
2. Connect the N line to the N pole of the bar placed on the fuses block.
3. Connect the PE line to the PE terminal block on the right side of the fuses block.

DWS-SWITCH-MONO ELECTRICAL DIAGRAM

The DWS-SWITCH-MONO components are electrically connected as displayed in the following diagram:

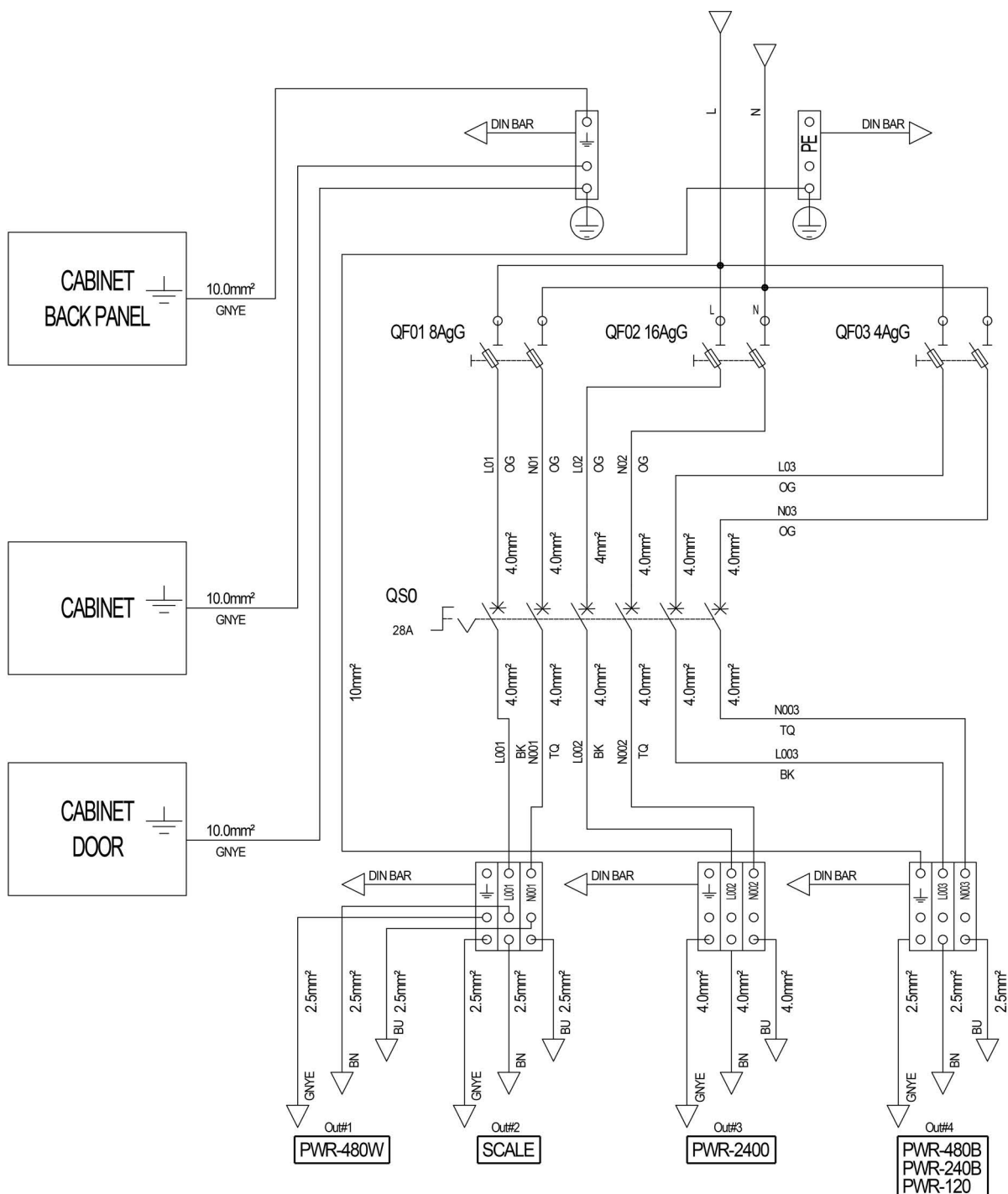


Figure 9 - DWS-SWITCH-MONO Electrical Diagram (Drawing Number GEL-9620)

CHAPTER 3

TECHNICAL FEATURES

ELECTRICAL FEATURES	
Input	230 V 1~ 50 Hz; I max 28 A Icp 10kA
Output	230 V 1~ 50 Hz; I max 16 A
	230 V 1~ 50 Hz; I max 8 A
	230 V 1~ 50 Hz; I max 4 A
ENVIRONMENTAL FEATURES	
Operating Temperature	0 to +50 °C (+32 to +122 °F)
Storage Temperature	-25 to +70 °C (-13 to +158 °F)
Humidity	5-95% non condensing
Protection Class EN 60529	IP65*
PHYSICAL FEATURES	
Mechanical Dimensions HxLxD	400 x 300 x 210 mm (15.8 x 11.8 x 8.3 in)
Weight	about 13 kg (28.7 lbs)

* when cables are inserted into the proper compression connectors and all unused compression connectors are sealed.

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