A single switch can be used for multiple devices.
• The earth connection must be made with a specific lead
• If the product is used in applications with risk of harm to persons or damages to machines or materials, it MUST be equipped with auxiliary alarm devices.

It is advisable to provide the ability to check the tripped alarms during regular operation.

NOTES ON ELECTRICAL SAFETY AND ELECTROMAGNETIC COMPATIBILITY:
CE: Conformity EMC (electromagnetic compatibility) conformity in compliance with Directive 2014/30/EU and following modifications. Series CFW are mainly intended for industrial use, installed on panels or control panels of production process machines or systems. For purposes of electromagnetic compatibility, the most restrictive generic standards have been adopted, as shown in the table.

LV (low voltage) conformity in compliance with Directive 2014/35/EU. EMC conformity has been verified with the connections indicated on table 1 (see user’s manual).

RECOMMENDATIONS FOR CORRECT INSTALLATION FOR PURPOSES OF EMC INSTRUMENT power supply
• The power supply for the electronic instrumentation on the panels must always come directly from the cut-off device with fuse for the instrument part.
• Electronic instrumentation and electromechanical power devices such as relays, contactors, solenoids etc., MUST ALWAYS be powered by separate lines.
• When the power supply line of electronic instruments is heavily disturbed by switching of thyristor power groups or by motors, you should use an isolation transformer only for the controllers, grounding its sheathing.
• It is important for the system to be well-grounded: - voltage between neutral and ground must not be > 1V
• Ochrnic resistance must be < 5Ω.
• If the grid voltage is highly unstable, use a voltage stabilizer.
• In proximity of high-frequency generators or arc welders, use adequate grid filters.
• The power supply lines must be separate from instrument input and output lines.

INPUT AND OUTPUT CONNECTIONS
Before connecting or disconnecting any connection, always check that the power and control cable are isolated from voltage. Appropriate devices must be provided: fuses or automatic switches to protect power lines. The fuses present in the module function solely as a protection for the CFW semiconductors.

• Connected outside circuits must be doubly isolated.
• To connect analog inputs, strain gauges, linear, (TC, RTD), you have to: - physically separate the input cables from those of the power supply, outputs, and power connections.
• Be braided and shielded cables, with sheathing grounded at a single point.

INSTALLATION NOTES
Use the extra-rapid fuse indicated in the catalogue according to the connection example equipped.
• Moreover, the applications with solid-state units require a safety automatic switch to section the load power line. To ensure the high reliability of the device, it is necessary to install it properly inside the panel so to obtain an adequate thermal exchange.
• Fit the device vertically (maximum angle 10° to the vertical axis)
• Vertical distance between a device and the panel wall >100mm
• Horizontal distance between a device and the panel wall at last 10mm
• Vertical distance between a device and the next one at last 300mm.
• Horizontal distance between a device and the next one at last 10mm.
• Check that the cable holder runners do not reduce these distances, in this case fit the cable units opposite the panel so that the air can flow vertically without any obstacles.
• Dissipation of device thermal power with effects on installation room temperature.
• Thermal power dissipation with limits on installation room temperature.
• Requires exchange with external air or an air conditioner to transfer dissipated power outside the panel.
• Maximum limits of voltage and derived power of transients on the line, for which the solid state power unit contains protective devices (based on the model).
• Presence of dispersion current in CFW in non-conducting state (current of a few mA due to RC Snubber circuit to protect the thyristor).

3. FUSE REPLACEMENT
Replacing the Internal Fuse (Optional)

WARNING
CUT OFF POWER BEFORE AND DURING FUSE SUBSTITUTION PROCEDURE
• Undo the cover latch (1)
• Remove the cover following the movement indicated by the arrow (2)
• In this way the fuse is discovered (3)
• Slacken the two bolts fixing the fuse in place with a No.19 spanner (CFW 500/600A) or a No.11 spanner (CFW 400A). There is no need to remove the bolts, as the fuse is pulled out of its housing as shown by the arrows (4)
• Insert the new fuse as indicated by the arrows (5)

WARNING: the washer must be between the bolt and the copper strap (NOT under the fuse),
• Tighten the two nuts with a No. 19 spanner (CFW 500/600A) or a No. 17 spanner (CFW 400A), to a torque of 12 Nm.
• Put the cover back in place, pinning down the top part first (be careful to hook it on the tooth as shown in the figure).
• Fasten the cover by the specific screw in side (1)

4. CERTIFICATIONS
Conformity C/CSA/US CoFC no. 70002856
(NOTE: CFW 400-600A products are not approved CSA)

The device are manufactured according with the Community Directives 2011/65/EU (RoHS) 2014/30/EU (EMC), 2014/35/EU (LVD) in reference to product standard: EN 50581:2012 e EN 60947-4-3:2014

Conformity C/UL/US file no. E243396 vol. 1, sez. 5 (NOTE: UL pending for CFW 400...600A)

Short Circuit Current Rating 100KA / 600V according to UL 508 for 100 A, 200 A and 250 A, 480 V and 600 V models only

5. FIXING INSTALLATION

CFW 40 to 300A

CFW 400 TO 600A

M 5 (x 6 Holes)
M 5 (x 4 Holes)
CE:
Conformity C/CSA/US CoFC no. 70002856

The device are manufactured according with the Community Directives 2011/65/EU (RoHS) 2014/30/EU (EMC), 2014/35/EU (LVD) in reference to product standard: EN 50581:2012 e EN 60947-4-3:2014

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10. CURVING CHARACTERS

<table>
<thead>
<tr>
<th>Model</th>
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<tbody>
<tr>
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<tr>
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