

DISTRIBUTION & MEASUREMENT EQUIPMENT FOR LOW VOLTAGE NETWORK

Application

- These products are intended for power distribution and metering and also for protection of household circuits of individual consumers.

Reference documents

- IEC 60664-1/1998.
- SR EN 60068-1+A1:95; 60068-2-1+A1:95
- SF 152-2000
- STAS: 2612/87; 297-2/92; 2604/4,5-89,90; 11200-299/80; 243/86; 6692/83; 6667/85; 6300/81; 8393/4,5,6/81/82, 12743-2...89

RS 80824 [] [] RS 80825 [] []

FDCP - Power distribution and metering indoor cabinets

Description

- The product is manufactured in a metallic case with two separate compartments: a measurement one where the meters are placed and another one for electric power general supply and distribution protection. Every compartment is provided with a door, and meters compartment door is provided with windows for meters index riding.
- In order to prevent the access of unauthorized persons inside the cabinet, the door of the meters compartment is equipped with a triangular lock; it can be locked at request by an additional lock.
- The meters compartment can be equipped with single-phase electronic watt-hour meters type CSM Electromagnetica or other types.
- The consumers compartment, for distribution and protection of consumer' circuits can be equipped either with single pole automatic breakers or with automatic breakers, residual current relays and overvoltage relays.
- The general supply of the cabinet can be made at request either directly through terminals, or through fuses or general protection breakers, from which derivations can be made to other cabinets.
- Depending on the constructive solution the connection of the consumers' circuits can be made either by single pole breakers or two-pole automatic differential breakers.
- The consumers' compartment is equipped with maskscreen-shield under its door or with windows into the door for the access to automatic breakers.
- On customers' request Electromagnetica can supply FDCP in plastic enclosures of fireproof materials and equipped with transparent covers which are resistant to UV action.

Warranty

- 12 months from installation, but no more than 24 months from delivery.



Constructive characteristics

- The product is made in a metallic enclosure of steel sheet painted in electrostatic field. The enclosure is equipped with holes for cables access, placed at the back, up and down.
- The enclosure is mounted buried in a wall or in a niche, or it can be fixed on wall by nails.
- The customer shell specify if the cabinet must be supplied with or without the near wall.
- The access inside of meters compartment is allowed only to energy supplier, but meter index vision is allowed also for subscriber through transparent windows.
- Inside the consumers compartment, these have access only for replacing fuses cartridges or for reinforcing the circuit-breakers.
- Electric equipment is according to the electric diagram corresponding to the constructive solution.
- The doors of the two compartments are connected galvanically to the grounding of the enclosure.
- The enclosure is equipped inside with a screw for electric connection at building or installation ground electrode.

Environmental Conditions

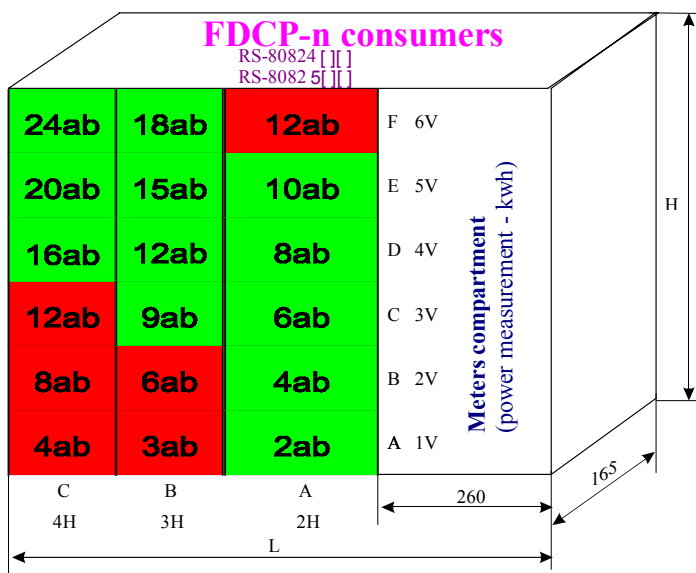
- operating temperature : $-33^{\circ}\text{C} \div +70^{\circ}\text{C}$
- temperature range for transport and storage : $-33^{\circ}\text{C} \div +50^{\circ}\text{C}$
- relative humidity : 90% la 20°C
- maximal altitude : 2000 m
- lifetime : 20 years

DISTRIBUTION & MEASUREMENT EQUIPMENT FOR LOW VOLTAGE NETWORK

Indoor Cabinets

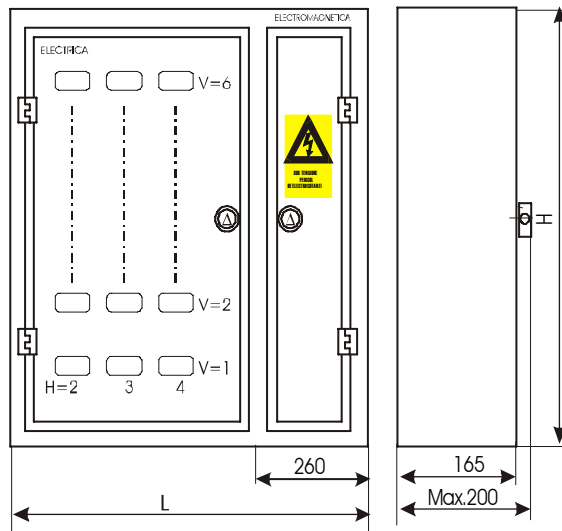
Technical data

- rating voltage 0.4 KV
 - insulation voltage 660 Vc.a.
 - rating frequency 50 Hz
 - rating current > 35 A depending on consumers
 - consumer rated voltage 0.23 kV
 - consumer rated current 25 A (other value at request)*
 - release voltage at:
 - phase-neutral overvoltage 270 V ± 10 V*
 - neutral-ground residual voltage ≥ 50 V*
 - disconnection time at overvoltages t < 0,2 s*
 - breaking capacity of consumer breaker ≥ 6 kA
 - operating characteristic of consumer breaker C,D
 - mechanical wear resistance 30000 operations
 - electric wear resistance 8000 operations
 - protection degree IP 42 excepting back wall which is IP 00
 - protection against electrocution class 1
 - overall dimensions, net weight, mounting dimensions: depending on consumer number
- * Characteristics are valid only for FDCPs equipped with two-pole differential breakers and overvoltage protection devices.

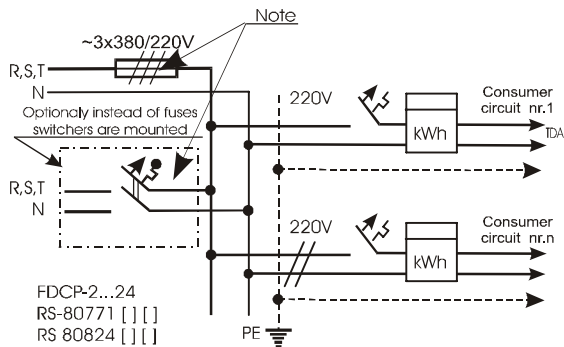


No.	Cabinet type	Manufacture code		No. of consumers	Number of meters horizontally (H), vertically (V)	L [mm]	H [mm]
		Consumers circuit protection with single pole automatic breakers	Consumers circuit protection with automatic breaker, differential relay and overvoltage relay				
1	FDCP-2 ab.	RS-80824AA	RS-80825AA	2	2H x 1V	660	350
2	FDCP-4 ab.	RS-80824AB	RS-80825AB	4	2H x 2V	660	595
3	FDCP-6 ab.	RS-80824AC	RS-80825AC	6	2H x 3V	660	840
4	FDCP-8 ab.	RS-80824AD	RS-80825AD	8	2H x 4V	660	1085
5	FDCP-9 ab.	RS-80824BC	RS-80825BC	9	3H x 3V	810	840
6	FDCP-10 ab.	RS-80824AE	RS-80825AE	10	2H x 5V	660	1330
7	FDCP-12 ab.	RS-80824BD	RS-80825BD	12	3H x 4V	810	1085
8	FDCP-15 ab.	RS-80824BE	RS-80825BE	15	3H x 5V	810	1330
9	FDCP-16 ab.	RS-80824CD	RS-80825CD	16	4H x 4V	960	1085
10	FDCP-18 ab.	RS-80824BF	RS-80825BF	18	3H x 6V	810	1575
11	FDCP-20 ab.	RS-80824CE	RS-80825CE	20	4H x 5V	960	1330
12	FDCP-24 ab.	RS-80824CF	RS-80825CF	24	4H x 6V	960	1575

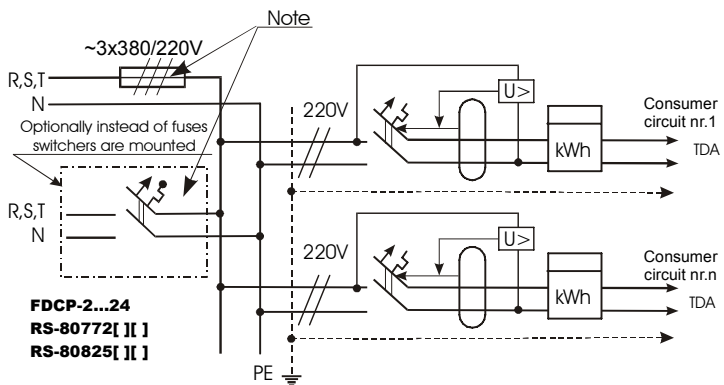
DISTRIBUTION & MEASUREMENT EQUIPMENT FOR LOW VOLTAGE NETWORK



RS-80824 [] []
RS-80825 [] []



Note: Protections from general three-phase supply circuit are foreseen at more than 6 consumers.



Note: Protections from general three-phase supply circuit are foreseen at more than 6 consumers



ELECTROMAGNETICA S.A.
Bucharest - Romania
266-268 Calea Rahovei
Phone: ++ 4021 404 21 47
Fax: ++ 4021 404 21 48
www.electromagnetica.ro

