DISTRIBUTION & MEASUREMENT EQUIPMENT FOR LOW VOLTAGE NETWORK

Application

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

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 80771 [ ] [ ]
RS 80772 [ ] [ ]
FDCP - Power distribution and metering indoor cabinets

Description

- The product consists 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 reading.
- 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 model or other types.
- The consumer 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 consumer circuits can be made by single pole breakers or two-pole automatic differential breakers.
- The consumer 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 enclosure 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 case of steel sheet painted in electrostatic field. The enclosure is equipped with holes for cables access, placed at the back, up and down.
- The case 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 rear wall.
- The access inside of meters compartment is allowed only to energy supplier, but meter index vision is allowed also to consumer through transparent windows.
- Inside the consumer compartment, these have access only for replacing fuses cartridges or for reinforcing the circuit breakers.
- Electrical equipment is according to the electric diagram corresponding to the constructive solution.
- The doors of the two compartments are connected galvanically to the grounding plate of the case.
- The enclosure is equipped inside with a screw for electric connection at building or installation ground electrode.

Environmental Conditions

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

ISO 9001

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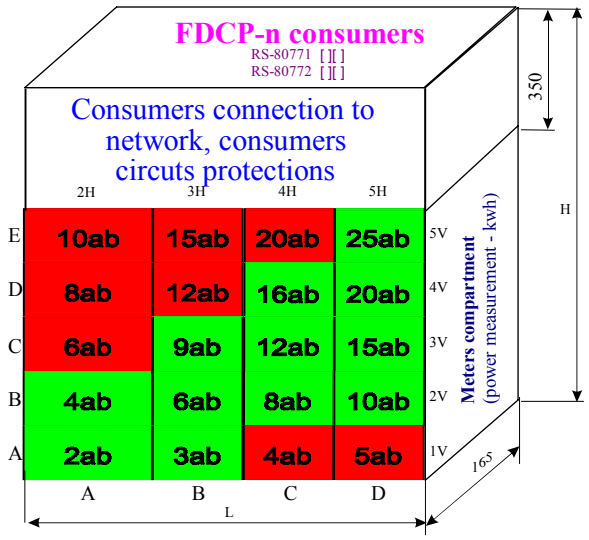
Technical data

- 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-neutra overvoltage l 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.	Type of cabinet	Manufacture code		No. of consumers	Number of meters horizontally (H) vertically (V)	L [mm]	H [mm]
		Consumers circuit protection with single pole automatic breaker	Consumers circuit protection with automatic breaker differential relay and overvoltage relay				
1	FDCP-2 ab.	RS-80771AA	RS-80772AA	2	2H x 1V	410	700
2	FDCP-3 ab.	RS-80771BA	RS-80772BA	3	3H x 1V	560	700
3	FDCP-4 ab.	RS-80771AB	RS-80772AB	4	2H x 2V	410	945
4	FDCP-6 ab.	RS-80771BB	RS-80772BB	6	3H x 2V	560	945
5	FDCP-8 ab.	RS-80771CB	RS-80772CB	8	4H x 2V	710	945
6	FDCP-9 ab.	RS-80771BC	RS-80772BC	9	3H x 3V	560	1190
7	FDCP-10 ab.	RS-80771DB	RS-80772DB	10	5H x 2V	860	945
8	FDCP-12 ab.	RS-80771CC	RS-80772CC	12	4H x 3V	710	1190
9	FDCP-15 ab.	RS-80771DC	RS-80772DC	15	5H x 3V	860	1190
10	FDCP-16 ab.	RS-80771CD	RS-80772CD	16	4H x 4V	710	1435
11*	FDCP-18 ab.	RS-80771EC	RS-80772EC	18	6H x 3V	960	1190
12	FDCP-20 ab.	RS-80771DD	RS-80772DD	20	5H x 4V	825	1435
13*	FDCP-24 ab.	RS-80771ED	RS-80772ED	24	6H x 4V	960	1435
14	FDCP-25 ab.	RS-80771DE	RS-80772DE	25	5H x 5V	825	1680
15*	FDCP-30 ab.	RS-80771EE	RS-80772EE	30	6H x 5V	960	1680

* On customers' request Electromagnetica can supply these cabinets

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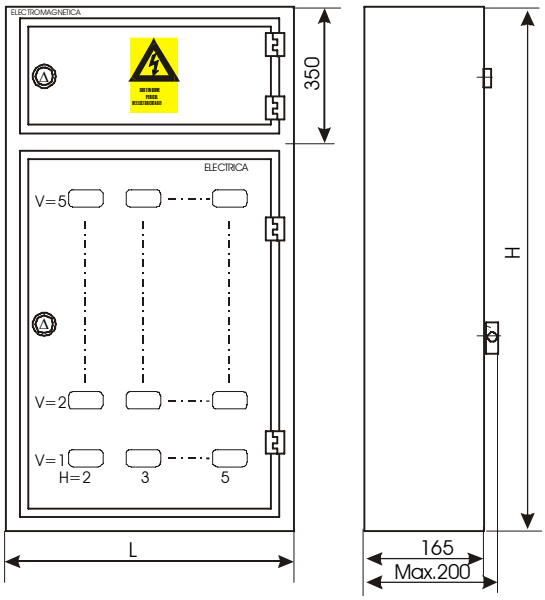
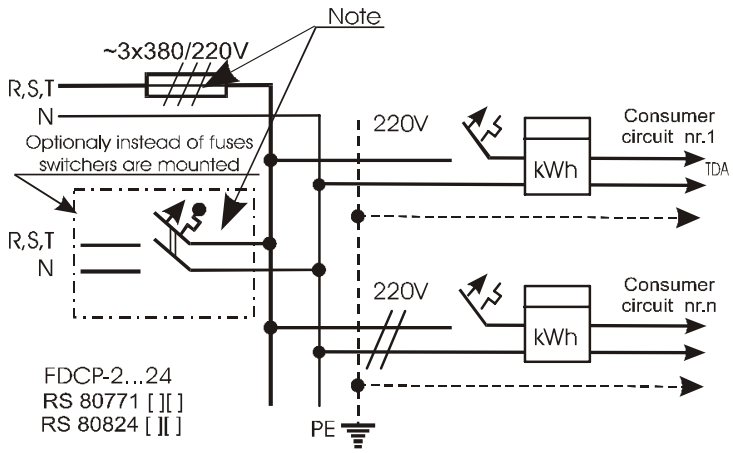
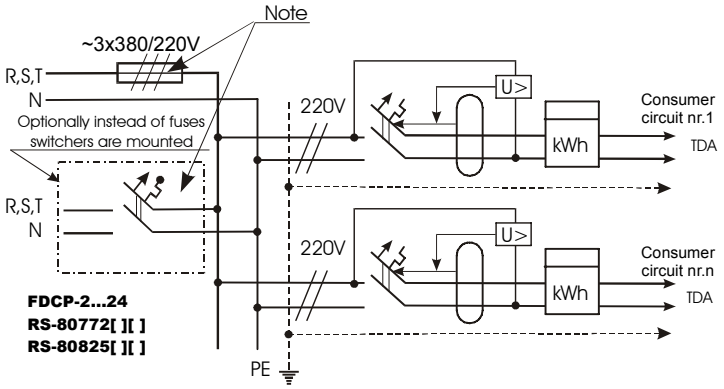




Note: Protections from general three-phase supply circuit are foreseen at more than 6 consumers.



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