

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
- 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 80956 [] [] [] E

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 indexes vision.
- 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 only with single-phase electronic watt-hour meters type Electromagnetica, RS 80980 CXX.
- The consumers compartment, for distribution and protection or consumers' 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 breaker 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 plastics 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.



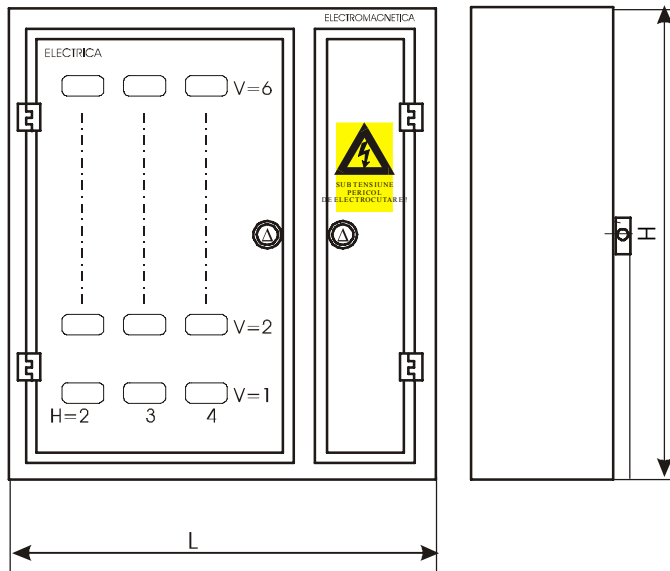
Constructive characteristics

- The product is made in a metallic 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 consumer 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.

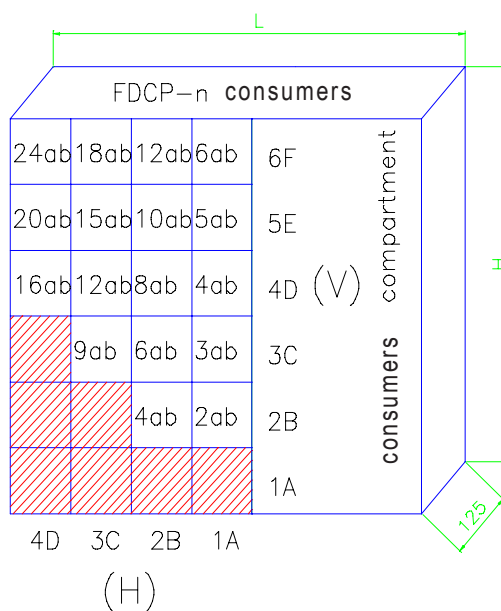
Environmental Conditions

- environmental 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

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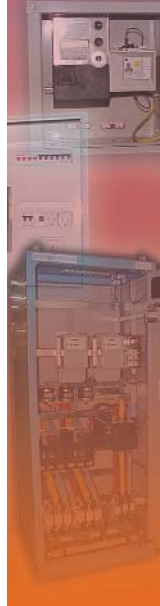


Ab*	HxV*	Manufacture code-FDCP subscribers circuit protection with single pole automatic breakers	Manufacture code-FDCP subscribers circuit protection with automatic breaker differential relay and overvoltage relay	H(mm)	L(mm)
2	1Hx2V	RS-80956ABM	RS-80956ABB	455	470
3	1Hx3V	RS-80956ACM	RS-80956ACB	620	470
4	1Hx4V	RS-80956ADM	RS-80956ADB	785	470
4	2Hx2V	RS-80956BBM	RS-80956BBB	455	580
5	1Hx5V	RS-80956AEM	RS-80956AEB	950	470
6	1Hx6V	RS-80956AFM	RS-80956AFB	1115	470
6	2Hx3V	RS-80956BCM	RS-80956BCB	620	580
8	2Hx4V	RS-80956BDM	RS-80956BDB	785	580
9	3Hx3V	RS-80956CCM	RS-80956CCB	620	690
10	2Hx5V	RS-80956BEM	RS-80956BEB	950	580
12	2Hx6V	RS-80956BFM	RS-80956BFB	1115	580
12	3Hx4V	RS-80956CDM	RS-80956CDB	785	690
15	3Hx5V	RS-80956CEM	RS-80956CEB	950	690
16	4Hx4V	RS-80956DDM	RS-80956ddb	785	800
18	3Hx6V	RS-80956CFM	RS-80956CFB	1115	690
20	4Hx5V	RS-80956DEM	RS-80956DEB	950	800
24	4Hx6V	RS-80956DFM	RS-80956DFB	1115	800

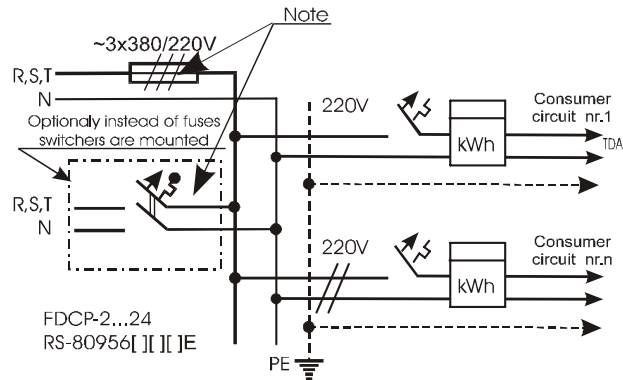
* Ab. = No. of consumers

HxV = No. of meters horizontal (H) x vertical (V)

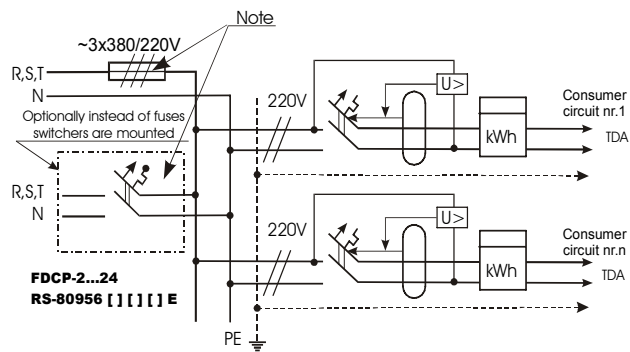
Indoor Cabinets



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



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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-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 FDCEPs equipped with two-pole differential breakers and overvoltage protection devices.

Indoor Cabinets



ISO 9001

ELECTROMAGNETICA