87045 LIMOGES Cedex
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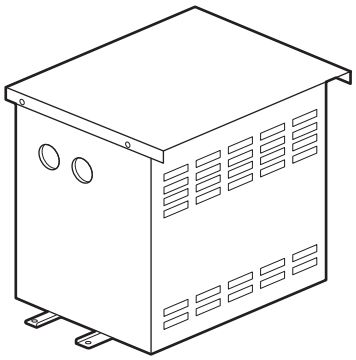
Single phase separating transformer

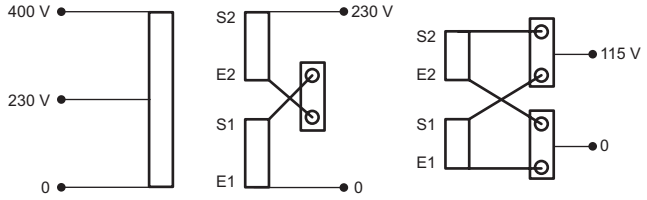
Cat. Nos.: 0 425 00/01/02/03/04/05



CONTENTS

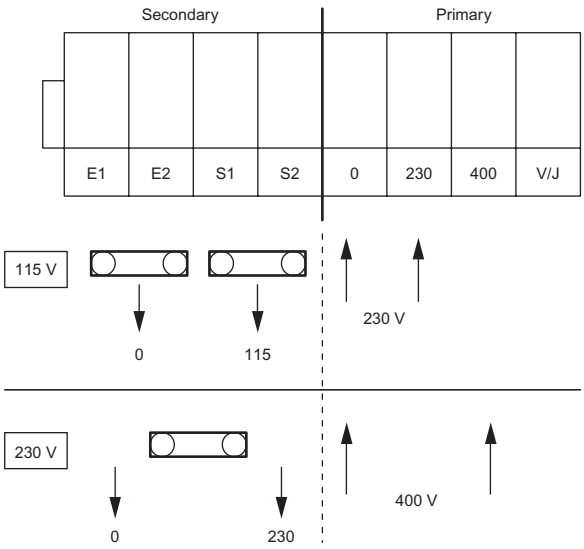
1. OPERATING PRINCIPLE

Transformer designed to isolate load from main network.



Sample connection

Secondary 115 or 230 V, serial - parallel connectionby coupling barrals supplied with:



2. MAIN CHARACTERISTICS

Dry type air cooled transformer.
Single phase 50 - 60 Hz frequency - Class 1.
Insulation and heating:
- Class B up to 2.5 KVA,
- Class H from 4 to 10 KVA.

Insulation voltage values:
- 3000 V between windings,
- 3000 V between windings and earth.

Ambiant temperature:
- 25°C up to 2.5 KVA,
- 40°C above.

2.1 Conformities

Conform to NF EN 60076-11 standard.
CE marking.
CEM compatibility.

2.2 Transformers protection

Transformers can be protected by aM type fuse or D type mcb on primary side.
Transformers can be protected by gG type fuse or C type mcb on secondary side.

2.3 Casing

2.3.1 Enclosure IP 21 - IK08

RAL 7035.
Information: name-plaque on cover with:
- reference number,
- voltages,
- currents,
- rating,
- standard,
- frequency,
- Ucc.

Secondary coupling diagram on magnetic core.

2.3.2 Magnetic core

In silicon magnetic steel sheet.

2.3.3 Connection

Terminal blocs (cage system).

Single phase separating transformer

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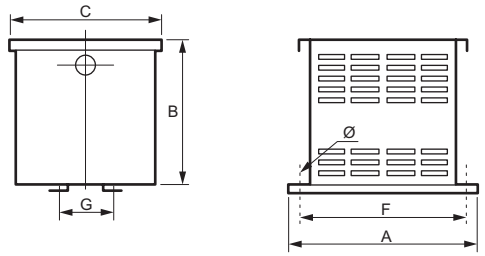
3. RANGE / ELECTRICAL CHARACTERISTICS

Primary: 230 V - 400 V.
Secondary: 115 V – 230 V by serial parallel coupling, connection strips supplied.

Cats. Nos	Rating (VA)	Losses		Voltage drop	Efficiency at reference T°	Ucc at reference T°	Primary terminals	Secondary terminals
		No load losses (W)	Due to load losses at reference T° (W)	cos fi = 1 (%)		(%)	mm²	mm²
0 425 00	1 000	45.5	38.5	3.3	92.3	3.8	6	6
0 425 01	1 600	65.0	42.8	2.3	93.6	2.7	6	6
0 425 02	2 500	88.8	50.0	1.8	94.7	2.1	10	10
0 425 03	4 000	77.0	220.0	5.3	93.2	5.2	10	16
0 425 04	6 300	120.0	270.0	4.2	94.2	4.1	16	16
0 425 05	10 000	162.0	392.0	3.8	94.9	3.9	16	35

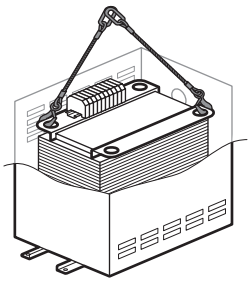
4. DIMENSIONS



Cats. Nos	Rating (VA)	Dimensions (mm)			Fixing (mm)			Weight (kg)
		A	B	C	F	G	Ø	
0 425 00	1 000	230	270	253	210	135	7	25
0 425 01	1 600	250	270	253	230	134	7	26
0 425 02	2 500	320	330	253	300	111	9	36
0 425 03	4 000	300	390	230	280	130	9	39
0 425 04	6 300	340	410	320	320	130	9	49
0 425 05	10 000	340	410	320	320	180	9	78

5. HANDLING / LIFTING OPERATION

Lifting holes (Ø 25 mm) on upper fitting devices, cover opened.



6. PROTECTIONS

Minimal protection rating for primary supply line on transformer(1).

Rating	230 V				400 V			
	aM type fuse		D type Mcb		aM type fuse		D type Mcb	
1000 VA	10 A	0 130 10	10 A	4 080 14	4 A	0 130 04	6 A	4 080 12
1600 VA	10 A	0 130 10	16 A	4 080 15	6 A	0 130 06	10 A	4 080 14
2500 VA	16 A	0 130 16	25 A	4 080 17	10 A	0 130 10	16 A	4 080 15
4 kVA	25 A	0 130 25	32 A	4 080 18	16 A	0 130 16	20 A	4 080 16
6.3 kVA	32 A	0 140 32	50 A	4 080 20	20 A	0 130 20	32 A	4 080 18
10 kVA	63 A	0 150 63	80 A	4 094 58	32 A	0 140 32	50 A	4 080 20

(1) These values are indicative's one for transformers with inrush current value close to 25 In.

Secondary side protection.

Rating	115 V				230 V			
	Caliber	Fuse	Caliber	Mcb	Caliber	Fuse	Caliber	Mcb
1000 VA	8	0 133 08	8	4 076 97	4	0 133 04	4	4 076 95
1600 VA	16	0 133 16	13	4 076 99	8	0 133 08	8	4 076 97
2500 VA	20	0 133 20	20	4 077 01	10	0 133 10	10	4 076 98
4 kVA	32	0 143 32	32	4 077 03	16	0 133 16	16	4 077 00
6.3 kVA	50	0 143 50	50	4 076 59	25	0 133 25	25	4 077 02
10 kVA	80	0 153 80	80	4 091 40	40	0 143 40	40	4 077 04

ADDITIONAL CHARACTERISTICS

6.1 Calorific potential (Mega Joules)

Cats. Nos.	P. Cal. (MJ)
0 425 00	250
0 425 01	260
0 425 02	300
0 425 03	330
0 425 04	370
0 425 05	550

6.2 Casing resistance to chemical agents

Resistance to spraying risk under ambient temperature.

++ : Excellent resistance (permanent exposure)
\+ : Satisfactory resistance (long-term exposure)
– : Limited resistance (possibility of brief exposure)
– – : Low resistance (exposure should be avoided)

Aqueous solutions	Cold water	++
	Hot water	+
	Vapour	-
	Salt water 5 %	+
	Hydrogen peroxide	-
	Water + washing powder/liquid detergent	+
	Water + surface active agents	+
Alcohols	Ethanol	+
	Methanol	+
	Propanol	+
	Butanol	+
Strong oxidizing acids	Concentrate acetic acid	+
	Nitric acid 5 %	+
	Sulphuric acid 30 %	+
	Hydrochloric acid 30 %	+
	Perchloric acid 70 %	++
	Hydrofluoric acid 70 %	– –
	Chromic acid 50 %	–
	Phosphoric acid 30 %	+

7.2 Casing resistance to chemical agents (cont'd)

Weak acids	Diluted acetic acid < 25 %		+
	Citric acid		++
	Lactic acid		++
	Formic acid		+
	Uric acid		+
Bases	Ammonia		+
	Sodium hydroxide (soda)		+
	Sodium hypochlorite (bleach 12°)		+
	Potassium hydroxide (potash)		+
Oils and greases	Plant origin	Linseed oil	++
		Peanut/Olive oil	++
		Castor oil	++
		Glycerin	+
	Mineral origin	Paraffin (Vaseline)	++
		Car engine oil	+
		Silicon oils	++
		Cutting oils	++
		Hydraulic oils	+
Hydrocarbons	Lead-free petrol		+
	Gas-oil		++
	Kerosene		++
	White-spirit		++
Chlorinated solvents	Trichloroethylene		- -
	Trichloroethane		-
	Perchloroethylene		- -
	Methylene chloride		- -
	Carbon tetrachloride		- -
	Chloroform		-
Aromatic solvents	Benzene		+
	Toluene		-
	Xylene		+
Aliphatic solvents	Hexane		++
	Heptane		++