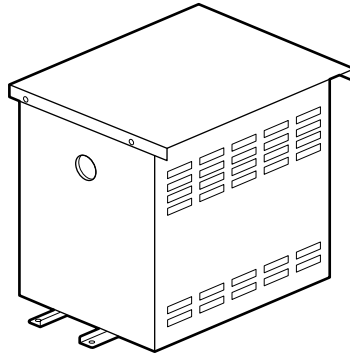
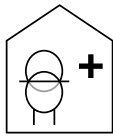


Three-phase isolating transformers for the supply of medical locations

Cat. No(s): 0 425 81/83/84/85

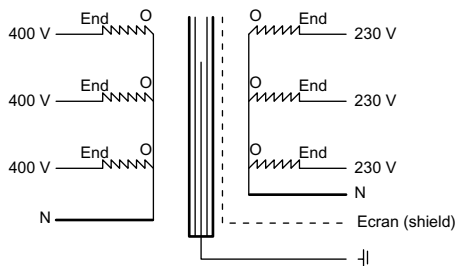


SOMMAIRE

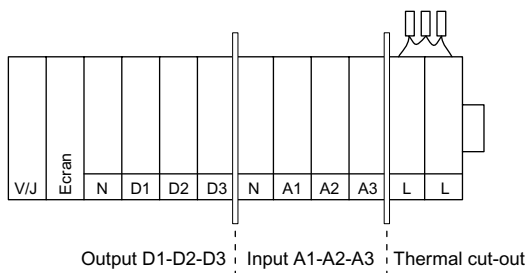
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1. OPERATING PRINCIPLE

Transformers designed for the supply of electrical network for group 2 medical locations (operating theatre, intensive care room ...). They shall be used to form the medical IT system for portable and fixed equipment in accordance with IEC 60364-7-710 standard (electrical installation of buildings) or French NFC 15211 standard.



Sample connection



- Ecran: Electrostatic shield, to be linked to earth.
- N: Neutral point of windings. Secondary one to be linked to an insulation monitoring device (IMD).
- LL: Thermal cut-out (refer to point 2.4).

2. MAIN CHARACTERISTICS

- Dry type air cooled transformer.
- Three-phase 50/60 Hz Class 1.
- Insulation voltage values:
 - 4450 V between windings
 - 3350 V between primary and earth
 - 3350 V between secondary and earth.
- Ambient temperature: 35° C
- Leakage current secondary earth ≤ 0.5 mA
- Inrush current $\leq 12 I_n$
- No load current $\leq 3\%$

2.1 Conformities

- CE marking
- CEM compliance
- Conform to IEC 61558-2-15 standard

2.2 Casing

- 2.2.1 Enclosure IP 21 - IK 08
- RAL 7035 / polyester coating 80 μ m.
- Information: nameplate on cover with:
 - reference number
 - voltages
 - rating
 - standard
 - frequency
 - Ucc

2.2.2 Magnetic core

In silicon magnetic steel sheet, 1 W 7 core quality.

2.3 Connection

Viking terminal blocs (cage system)

2.4 Integrated overheating device

- Thermal cut-out (normally closed) integrated into windings, connected on spare terminals (LL identification). To be linked to control/alarm optical or acoustic device.
- Switching temperature: 160° C
- Rated voltage: 250 V
- Rated current: 2.5 Amps $\cos \phi = 1$
1.6 Amps $\cos \phi = 0.6$

Three-phase isolating transformers for the supply of medical locations

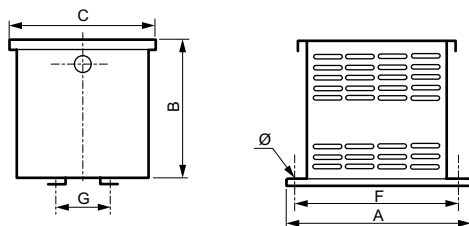
Cat. No(s): 0 425 81/83/84/85

3. RANGE

Primary: 400 V phase to phase, star connection neutral out.
Secondary: 230 V phase to phase, star connection neutral out.
Vector group: Yyn0
Electrostatic shields connected on dedicated terminal (Ecran).

Cat. No.	Rating (kVA)	Losses		Voltage drop	Efficiency at T° reference cos φi = 1 (%)	Ucc (%)	Primary terminals (mm²)	Secondary terminals (mm²)
		No load losses (W)	Due to load losses at T° reference (W)					
042581	4	50.2	190.0	3.3	95.0	3.3	10	10
042583	6.3	76.2	232.0	3.4	95.3	2.8	10	16
042584	8	96.1	281.0	3.2	95.4	2.7	16	35
042585	10	160.0	342.0	3.4	95.2	2.7	16	35

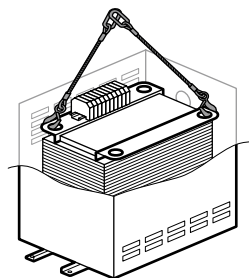
4. DIMENSIONS



Cat. No.	Rating (kVA)	Dimensions (mm)			Fixing (mm)			Weight (kg)
		A	B	C	F	G	Ø	
0 425 81	4	420	270	190	400	126	9	60
0 425 83	6.3	470	410	340	450	126	9	82
0 425 84	8	470	410	340	450	176	9	106
0 425 85	10	470	410	340	450	176	9	106

5. HANDLING/LIFTING OPERATION

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



6. PROTECTIONS

Protection device for primary supply of the transformer.

Rating (kVA)	Three phase 400 V Y+n	
	gG Fuse	MA curve mCB
4	10 A - 0 133 10	6.3 A - 4 098 89
6.3	16 A - 0 133 16	10 A - 4 098 90
8	16 A - 0 133 16	16 A - 4 098 92
10	20 A - 0 133 20	16 A - 4 098 92

7. ADDITIONAL CHARACTERISTICS

7.1 Calorific potential (Mega Joules)

Cat. Nos.	0 425 81	0 425 83	0 425 84	0 425 85
Cal. Pot (MJ)	440	600	780	780

7.2 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	+
Alcohols	Water - surface active agents	+
	Ethanol	+
	Methanol	+
	Propanol	+
Weak acids	Butanol	+
	Diluted acetic acid < 25 %	+
	Citric acid	++
	Lactic acid	++
	Formic acid	+
	Uric acid	+
Bases	Ammonia	+
	Sodium hydroxide (soda)	+
	Sodium hypochlorite (bleach 12°)	+
	Potassium hydroxide (postash)	+
Oils and greases	Glycerin	+
	Paraffin (vaseline)	++