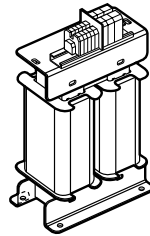
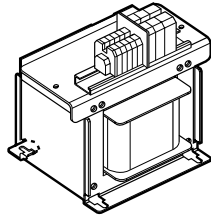
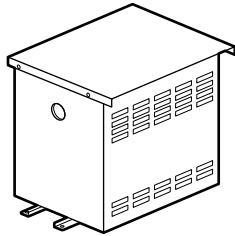
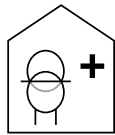


Single-phase isolating transformers for the supply of medical locations

Cat. Nos: **0 425 71/72/73/74 - 1 425 75/76**
0 425 91/92/93/94/95/96

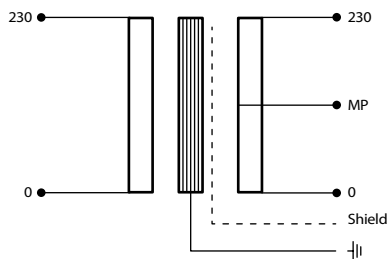


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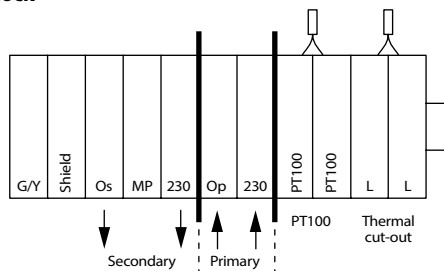
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1. OPERATING PRINCIPLE

Transformers conforming to IEC EN 61558-2-15 designed to ensure continuity of service, the quality of the electric power supply and the safety of patients under medical supervision.
Used to form the medical IT earthing system in Group 2 locations (operating theatres, recovery rooms, resuscitation rooms) in accordance with the requirements of standards NFC 15211 and IEC 60364-7-710 (Electrical installations of buildings).



Terminal block



Viking cage terminal block

- Shield:** Electrostatic shield, to be connected to the installation earth
- MP*:** Secondary midpoint
- LL*:** Thermal cut-out (monitoring temperature rise)
- PT100*:** PT100 thermocouple sensor

For connection of terminals LL and PT100, see point 2.4.

* To be connected to the insulation monitoring device (PIM). See LEGRAND PIM Cat. Nos. 0435 01 and 0435 02.

2. GENERAL CHARACTERISTICS

- Dry-type air-cooled transformers
- Single-phase 50-60 Hz Class I
- Insulation and heating:
 - Class B up to 2.5 kVA
 - Class H from 4 to 10 kVA
- Insulation voltage:
 - 3550 V between windings
 - 3550 V between primary and earth
 - 3550 V between secondary and earth
 - Ambient temperature: 25 °C
 - Secondary/earth leakage current ≤ 0.5 mA
 - Inrush current ≤ 12 In
 - No-load current $\leq 3\%$ In

2.1. Compliance

Conforming to standard IEC EN 61558-2-15
CE marking
EMC compliance

2.2 Transformer protection

Extract from standard NF C15211 article 13:
"Only short circuit protection is necessary for medical IT transformer circuits; overload current protection is not allowed". (Protection devices: see point 6).

2.3 Presentation

2.3.1 Cat. Nos. 0425 71/72/73/74 - 1 425 75/76

IP21 - IK08 enclosure
RAL 7 035
Polyester coating 80 μ m

2.3.2 Cat. Nos. 0425 91/92/93/94/95/96

IP003
These transformers are designed for use in medical enclosures.

Nameplate on cover for IP21 transformers and on circuit for IP00 transformers, with the following information:

- product Cat. No.
- voltage
- rating
- reference standard
- frequency
- U_{sc}

Single-phase isolating transformers for the supply of medical locations

Cat. Nos: 0 425 71/72/73/74 - 1 425 75/76
0 425 91/92/93/94/95/96

2. GENERAL CHARACTERISTICS (continued)

2.4 Integrated overheating device

2 types of device are available:

a/ Normally closed temperature sensor integrated into windings, connected to 2 separate terminals (marked LL), to be connected to an optical or acoustic monitoring/alarm device for alerting medical staff.

Temperature trip point 110 °C for 2.5 kVA ratings

Temperature trip point 160 °C for 4 kVA to 10 kVA ratings

Operating voltage: 250 V

b/ PT100 thermocouple integrated in the windings, connected to 2 separate terminals (marked PT100), to be connected to an insulation monitoring device (PIM).

Option to use 2 overheating monitoring devices, or just 1 if preferred.

3. RANGE/ELECTRICAL CHARACTERISTICS

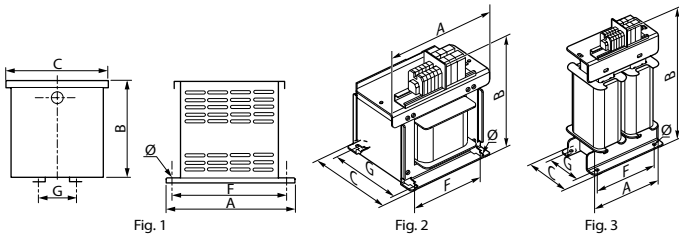
Primary : 230 V

Secondary : 230 V centre tapped

Electrostatic shield on dedicated terminal

Cat. No.	Power (kVA)	Losses		Voltage drop	Efficiency	Usc cold (%)	Primary terminal (mm ²)	Secondary terminal (mm ²)
		No-load (W)	Due to load at reference temp. (W)					
042571	2.5	22.3	93	2.8	96.2	3.1	16	16
042572	4	46.0	182	4.4	97.7	3.2	16	16
042573	5	64.0	245	4.4	96	3.1	35	35
042574	6.3	67.7	213	3.1	98.1	2.8	35	35
142575	8	88.0	382	4.4	96.1	3.8	35	35
142576	10	90.0	396	3.6	96.7	3.6	35	35
042591	2.5	22.3	93	2.8	96.2	3.1	16	16
042592	4	46.0	182	4.4	97.7	3.2	16	16
042593	5	64.0	245	4.4	96	3.1	35	35
042594	6.3	67.7	213	3.1	98.1	2.8	35	35
042595	8	88.0	382	4.4	96.1	3.8	35	35
042596	10	90.0	396	3.6	96.7	3.6	35	35

4. DIMENSIONS



Cat. No.	Power (kVA)	Fig.	Dimensions (mm)			Fixing (mm)			Weight (kg)
			A	B	C	F	G	Ø	
042571	2.5	1	320	330	253	300	111	9	39
042572	4	1	340	410	370	320	120	9	52
042573	5	1	340	410	370	320	150	9	60
042574	6.3	1	340	410	370	320	150	9	68
142575	8	1	390	460	380	370	140	9	68
142576	10	1	390	460	380	370	140	9	70
042591	2.5	2	300	292	171	200	114	9	33
042592	4	3	240	390	195	180	120	11	42
042593	5	3	240	390	250	180	150	11	50
042594	6.3	3	240	390	250	180	150	11	58
042595	8	3	290	420	220	194	138	11	58
042596	10	3	290	420	220	194	138	11	61

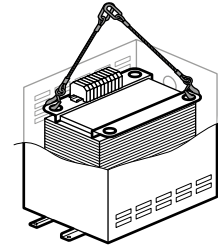


Strictly comply with instructions for installation and use.

5. HANDLING/LIFTING

Anchor points on the upper fittings.

For IP21 transformers, these fittings can be accessed once the cover has been removed.



6. PROTECTION DEVICES

Rating of the transformer primary side short-circuit protection devices.

Power	230 V single-phase	
	gG cartridge	MA circuit breaker
2500 VA	16A - 0 133 16	16A - 4 098 72
4000 VA	20A - 0 133 20	25A - 4 098 73
5000 VA	32A - 0 143 32	40A - 4 098 84*
6300 VA	40A - 0 143 40	40A - 4 098 84*
8000 VA	40A - 0 143 40	40A - 4 098 84*
10000 VA	50A - 0 143 50	63A - 4 098 85*

*3-pole MCB to be used as 2-pole

7. ADDITIONAL CHARACTERISTICS

7.1 Calorific value (expressed in Mega Joules)

Cat. Nos.	0 425 71	0 425 72	0 425 73	0 425 74	1 425 75	1 425 76
CV (MJ)	350	440	570	570	870	920

Cat. Nos.	0 425 91	0 425 92	0 425 93	0 425 94	0 425 95	0 425 96
CV (MJ)	320	360	520	520	670	740

7.2 Casings resistance to chemical agents

Resistance to risk of exposure to spray in ambient temperature conditions.

++ : Excellent resistance (continuous exposure)

+ : Satisfactory resistance (long-term exposure)

- : Limited resistance (brief exposure possible)

-- : Low resistance (exposure to be avoided)

Aqueous solutions	Cold water	++
	Hot water	+
	Steam	-
	5% saline solution	+
	Hydrogen peroxide	-
	Water + washing powder	+
Alcohols	Water + surfactants	+
	Ethanol	+
	Methanol	+
	Propanol	+
Bases	Butanol	+
	Ammonia	+
	Sodium hydroxide (soda)	+
Weak acids	Sodium hypochlorite (12° bleach)	+
	Diluted acetic acid < 25%	+
	Citric acid	++
	Lactic acid	++
	Formic acid	+
Oils and greases	Uric acid	+
	Glycerin	+
	Paraffin (Vaseline)	++