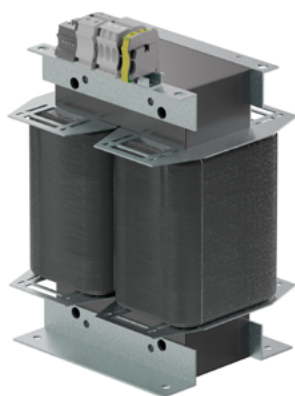


Single-phase medical location isolating transformer

Cat.Nos: 2 425 71 to 2 425 76
2 425 91 to 2 425 96



1. GENERAL CHARACTERISTICS

This transformer with electrostatic shield is designed to ensure service continuity, power quality, and patient safety under medical supervision. Allows for the implementation of a medical IT earthing system in group 2 classified premises (operating rooms, recovery rooms, intensive care units) according to the requirements of installation standards NF C 15211 and IEC 60364-7-710

2 versions available:

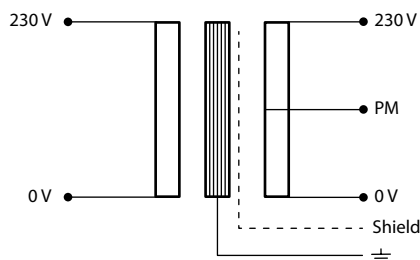
- IP 00: intended for use in medical cabinets
- IP21

Equipped with a temperature monitoring system: two types of temperature sensors available (bimetallic switch and PT100 thermocouple), with terminal outputs, making it compatible with all types of medical insulation monitoring devices (IMDs).

Dry-type equipment with natural air cooling.

Single-phase 50 - 60 Hz class 1

Schematic diagram:



2. RANGE

Cat.Nos	Power (kVA)	IP
2 425 71	2.5	21
2 425 72	4	
2 425 73	5	
2 425 74	6.3	
2 425 75	8	
2 425 76	10	00
2 425 91	2.5	
2 425 92	4	
2 425 93	5	
2 425 94	6.3	
2 425 95	8	
2 425 96	10	

2.1 Device connection

Connections via screw-clamp terminal blocks

Primary: 230 V~

Secondary: 230 V~ with center tap available on terminal blocks

PT100	PT100	L	L	Op	230	Os	PM	230	Shield	⏏
PT100 probe	Thermal limiter	Primary			Secondary			Shield	Earth	

Shield: electrostatic shield, to be connected to the installation ground

To be connected to the installation's Insulation Monitoring Device (IMD), see Cat.No 0 435 01 and 0 435 02:

- PT100 : PT100 temperature sensor
- LL: thermal limiter (temperature rise monitoring)
- PM : secondary centre tap

2.2 Connection of the temperature-sensitive device

Two types of monitoring devices are available:

- NF thermal sensor embedded in the winding, connected to two separate terminals (LL terminals), to be connected to a monitoring device with visual and/or audible alarm functions intended to alert the medical staff. Tripping at 160°C.

Operating voltage: 250 V.

- PT100 temperature sensor embedded in the winding, connected to two separate terminals (PT100 terminals), to be connected to a temperature monitoring device such as an IMD (Insulation Monitoring Device). Both temperature-sensitive monitoring devices can be used simultaneously, or only one of the two may be connected, depending on the installation requirements.

3. TECHNICAL CHARACTERISTICS

3.1 General characteristics

Insulation and temperature rise: Class H

Insulation voltages:

- 3550 V between windings
- 3550 V between primary and ground
- 3550 V between secondary and ground

Ambient temperature: 40°C

3.2 Mechanical characteristics

2 versions:

- 2 425 71/72/73/74/75/76 : IP21 - IK08 with enclosure RAL 7035
- 2 425 91/92/93/94/95/96 : IP00

3. TECHNICAL CHARACTERISTICS (continued)

■ 3.3 Calorific potential (expressed in Mega Joules)

Cat.Nos	P. Cal (MJ)
2 425 71	450
2 425 72	530
2 425 73	640
2 425 74	870
2 425 75	1050
2 425 76	1160
2 425 91	390
2 425 92	430
2 425 93	370
2 425 94	760
2 425 95	930
2 425 96	1050

■ 3.4 Transformer protection

Excerpt from standard NF C 15 211 article 13: «Circuits supplying medical IT system transformers must not be protected against overloads, but only against short-circuits».

Minimum rating for transformer primary supply line short-circuit protection

Power (kVA)	230 V single-phase			
	gG cartridge fuse		MA MCB	
2.5	16 A	0 133 16	16 A	4 098 72
4	20 A	0 133 20	25 A	4 098 73
5	32 A	0 143 32	40 A	4 098 84 ⁽¹⁾
6.3	40 A	0 143 40	40 A	4 098 84 ⁽¹⁾
8	40 A	0 143 40	40 A	4 098 84 ⁽¹⁾
10	50 A	0 143 50	63 A	4 098 85 ⁽¹⁾

(1) Three-pole MCB to be used as a two-pole MCB

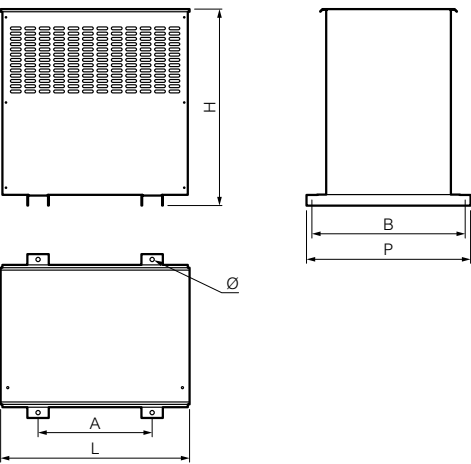
■ 3.5 Electrical characteristics

Primary: 230 V - Secondary: 230 V with centre tap

Cat.Nos	Power (kVA)	Losses		Voltage drop	Efficiency at 20°C	Ucc cold (%)	Primary terminal blocks	Secondary terminal blocks
		no-load (W)	due to load at 20°C (W)	cos φ = 1 (%)			flexible cable (mm²)	flexible cable (mm²)
2 425 71	2.5	40	47	1,88	96,6	2,8	16	16
2 425 72	4	60	82	2,05	96,5	2,4	16	35
2 425 73	5	57	100	2	96,9	2,3	16	35
2 425 74	6.3	100	130	2,06	96,4	2,4	35	35
2 425 75	8	100	156	1,95	96,9	2,6	35	35
2 425 76	10	120	165	1,65	97,2	2,1	35	35
2 425 91	2.5	40	47	1,88	96,6	2,8	16	16
2 425 92	4	60	82	2,05	96,5	2,4	16	35
2 425 93	5	57	100	2	96,9	2,3	16	35
2 425 94	6.3	100	130	2,06	96,4	2,4	35	35
2 425 95	8	100	156	1,95	96,9	2,6	35	35
2 425 96	10	120	165	1,65	97,2	2,1	35	35

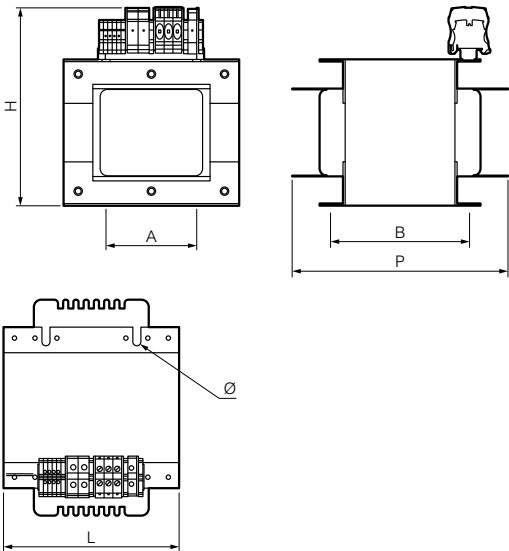
4. DIMENSIONS

Réfs 2 425 71 à 2 425 76



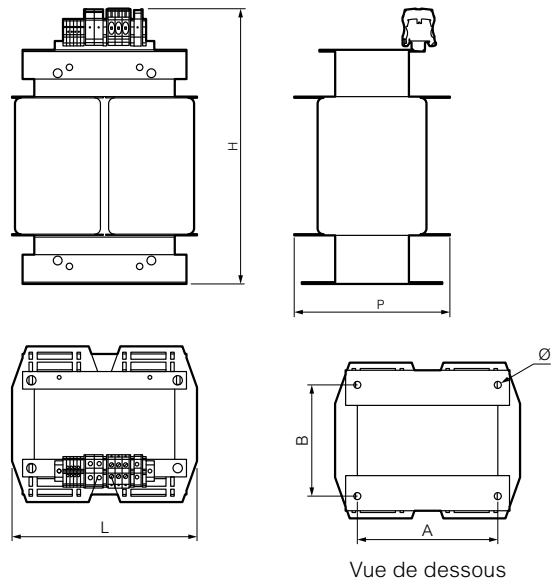
Cat.Nos	Dimensions (mm)			Fixing (mm)			Weight (kg)
	H	L	P	A	B	Ø	
2 425 71	385	360	400	210	375	10	48
2 425 72	385	360	400	210	375	10	58
2 425 73	385	360	400	210	375	10	57
2 425 74	560	530	460	320	430	12	84
2 425 75	560	530	460	320	430	12	95
2 425 76	560	530	460	320	430	12	107

Réfs 2 425 91/92/93



Cat.Nos	Dimensions (mm)			Fixing (mm)			Weight (kg)
	H	L	P	A	B	Ø	
2 425 91	270	240	295	125	190	11	40
2 425 92	270	240	295	125	190	11	50
2 425 93	270	240	295	125	190	11	53

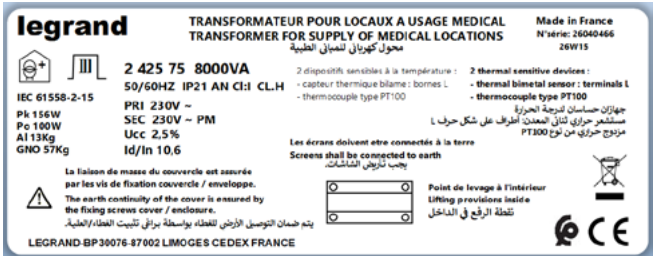
Réfs 2 425 94/95/96



Cat.Nos	Dimensions (mm)			Fixing (mm)			Weight (kg)
	H	L	P	A	B	Ø	
2 425 94	480	320	300	240	190	12	69
2 425 95	480	320	300	240	190	12	80
2 425 96	480	320	300	240	190	12	92

5. MARKING

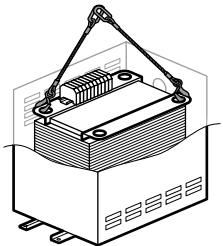
Information available on the product label positioned on the cover



Note: The information provided in this section is for guidance only. Actual data and marking layout may vary depending on the product version

6. HANDLING / LIFTING

Anchoring points on the upper fittings,
For IP21 transformers, the fittings are accessible after removing the cover



7. STANDARDS AND REGULATIONS

Compliant with standard IEC EN 61558-2-15

RoHS

Compliance with the 2011/65/EU Directive (RoHS), as modified by the 2015/863/EU Delegated Directive, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

REACH

The substances identified as SVHC (Substances of Very High Concern) according to the REACH Regulation (1907/2006), if present in the products at a concentration above 0.1% weight by weight, are declared inside the European SCIP database. At the date of publication of this document none of the substance listed in the annex XIV is found in this product.

WEEE

WEEE Directive (2012/19/EU): the sale of this product includes a contribution to the appointed environmental bodies of each European country in charge of handling, at the end of their life, the products falling within the scope of the EU Directive on Electrical and Electronic Equipment Waste

Packaging

Design and manufacture of packaging compliant with European Directive 94/62/CE.

8. OTHER INFORMATION

For more technical information, contact the technical support of Legrand.

Unless otherwise indicated, the data reported in this document refers exclusively to the test conditions according to the product standards. For different product usage conditions, inside electrical equipment or any other installation context, refer to the equipment's regulatory requirements, local regulations, and system design specifications.