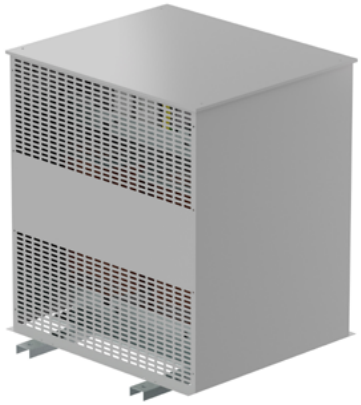
128, av. du Maréchal-de-Lattre-de-Tassigny - 87045 LIMOGES Cedex
Tél. : 33(0)5 55 06 87 87
www.legrand.com

High-efficiency three-phase transformer

Cat.Nos: 2 428 60 to 2 428 65

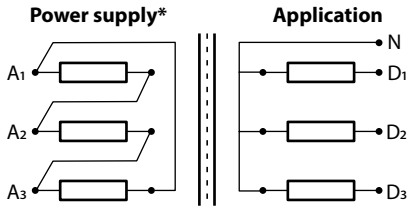




1. GENERAL CHARACTERISTICS

This transformer is intended to supply general-purpose electrical assemblies while providing functional isolation from the supply network (neutral system modification).
No-load losses and load losses are minimized to improve the transformer's performance and energy efficiency.
Dry-type equipment with natural air cooling.
Three-phase 50 - 60 Hz class 1

Schematic diagram:



* With volatge adjustment taps ± 5%

2. RANGE

Transformer with voltage adjustment taps and electrostatic shield.

Cat.Nos	Power (kVA)
2 428 60	50
2 428 61	63
2 428 62	80
2 428 63	100
2 428 64	125
2 428 65	160

■ 2.1 Device connection

Connection via terminal blocks suitable for copper conductors and cable lugs.
Primary: 400 V delta connection, with ±5% tapping points.
Secondary: 400 V, star connection with neutral brought out.
Electrostatic shield between windings, connected to the protective earth terminal.

N	D1	D2	D3	A1	-5%	400	-5%	A2	-5%	400	-5%	A3	-5%	400	-5%	⏚

Application: D1-D2-D3 : 3 x 400 V + N

Supply: A1-A2-A3 : 3 × 400 V, with ±5% voltage adjustment taps.

3. TECHNICAL CHARACTERISTICS

■ 3.1 General characteristics

Insulation: Class H

Insulation voltages:
- 3000 V between windings
- 3000 V between windings and ground

Ambient temperature: 40°C

■ 3.2 Mechanical characteristics

Enclosure IP 21 - IK 08
RAL 7035

■ 3.3 Calorific potential (expressed in Mega Joules)

Cat.Nos	P. Cal (MJ)
2 428 60	1530
2 428 61	1920
2 428 62	2390
2 428 63	2760
2 428 64	3280
2 428 65	4610

■ 3.4 Transformer protection

Primary-side protection may be provided by D-curve circuit breakers or aM cartridge fuses.
Secondary-side protection may be provided by C-curve circuit breakers or gG cartridge fuses..

Minimum rating for transformer primary supply line short-circuit protection

Power (kVA)	400 V three-phase			
	aM cartridge fuse		D curve MCB	
50	80 A	0 150 80	100 A	4 200 05
63	100 A	0 150 96	125 A	4 200 06
80	160 A	0 165 55	160 A	4 200 07
100	160 A	0 165 55	200 A	4 202 08
125	200 A	0 170 60	200 A	4 202 08
160	250 A	0 170 65	250 A	4 202 09

3. TECHNICAL CHARACTERISTICS *(continued)*

■ 3.4 Transformer protection *(continued)*

Minimum rating of the protection devices on the transformer secondary supply line

Power (kVA)	400 V Y+N			
	Cartridge fuse		MCB	
50	80	0 153 80	80	4 093 62
63	100	0 153 96	100	4 093 63
80	125	0 153 97	125	4 093 64
100	160	0 163 55	160	4 200 17
125	200	0 168 60	200	4 200 18
160	250	0 173 65	250	4 200 19

■ 3.5 Electrical characteristics

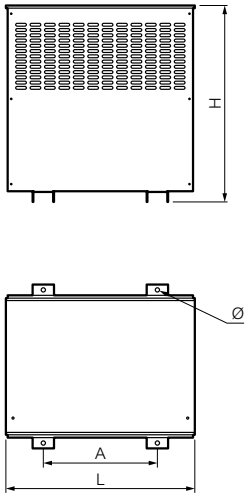
Primary: 230 V - 400 V

Cat.Nos	Power (kVA)	Losses		Voltage drop	Efficiency at 20°C	Ucc at 20°C (%)	Primary terminal blocks(1)		Secondary terminal blocks(1)	
		no-load (W)	due to load at 20°C (W)	cos φ = 1 (%)			flexible cable (mm^2)	Ø lugs (mm)	flexible cable (mm^2)	Ø lugs (mm)
2 428 60	**50**	250	823	1,65	97,9	3,1	35	8	35	8
2 428 61	**63**	330	909	1,44	98,1	2,5	35	8	35	8
2 428 62	**80**	357	1211	1,51	98	3,5	70	10	70	10
2 428 63	**100**	488	1376	1,37	98,1	3,1	120	10	70	10
2 428 64	**125**	596	1894	1,51	98	3,1	120	10	120	10
2 428 65	**160**	553	1739	1,09	98,6	2,8	120	10	120	10

(1) Copper connection only

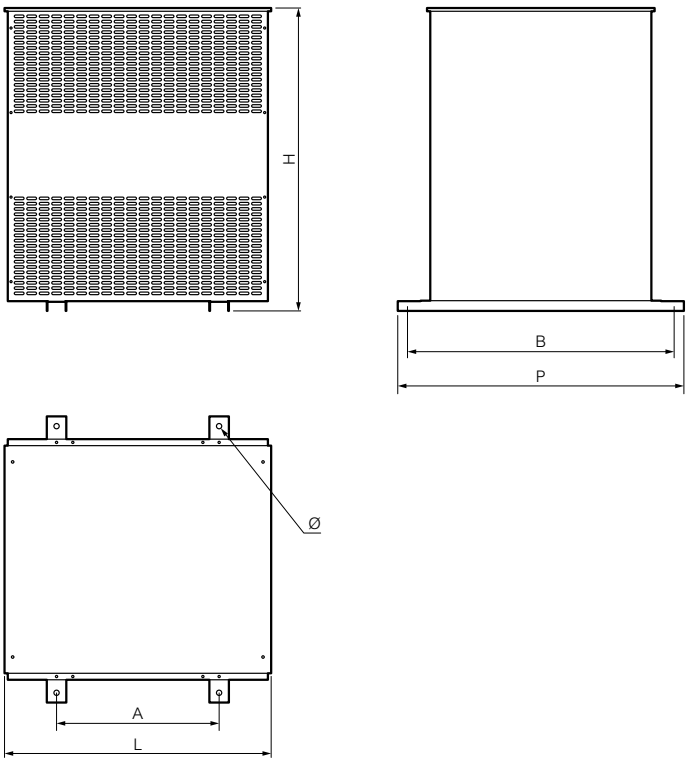
4. DIMENSIONS

Cat.Nos 2 428 60 to 2 428 63



Cat.Nos	Dimensions (mm)			Fixing (mm)			Weight (kg)
	H	L	P	A	B	Ø	
2 428 60	560	530	540	320	510	12	243
2 428 61	700	670	610	400	580	12	297
2 428 62	700	670	610	400	580	12	363
2 428 63	700	670	610	400	580	12	417

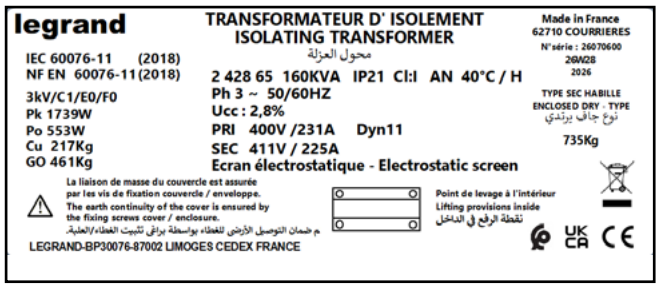
Cat.Nos 2 428 64/65



Cat.Nos	Dimensions (mm)			Fixing (mm)			Weight (kg)
	H	L	P	A	B	Ø	
2 428 64	940	820	880	500	820	16	551
2 428 65	940	820	880	500	820	16	735

5. MARKING

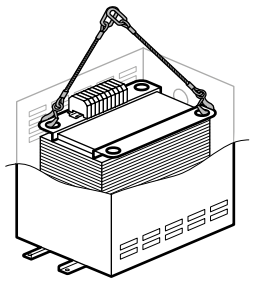
Information available on the product label positioned on the cover



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, accessible after removing the cover



7. STANDARDS AND REGULATIONS

Compliant with IEC 60076-11 standard: Power transformers Part 11: Dry-type transformers

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.