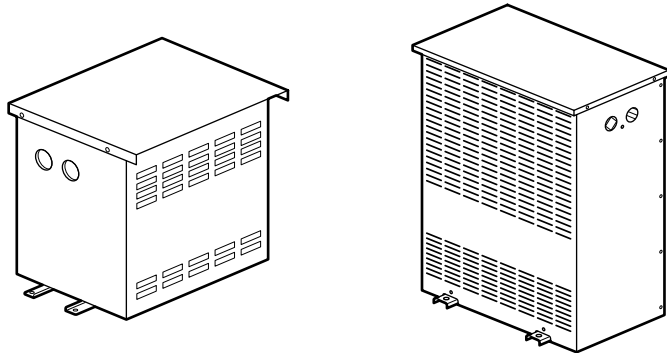


# Isolating single phase transformer

Cat. Nos.: 0 425 17/18/55/56/57/58  
1 425 59/60/61/62/63

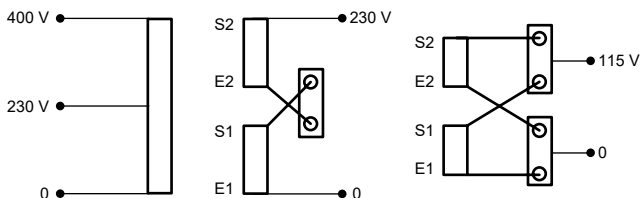


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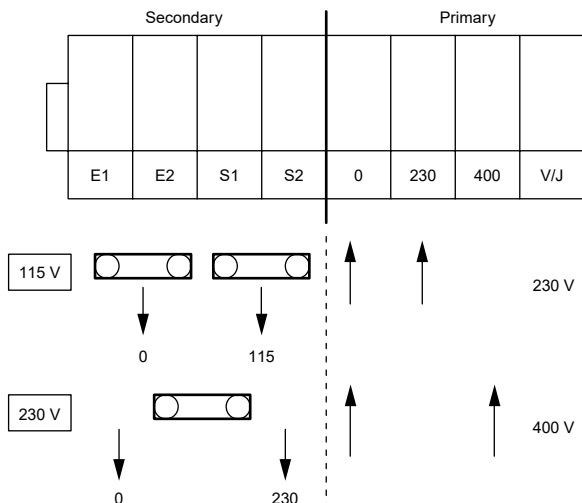
## 1. OPERATING PRINCIPLE

Transformer designed to supply equipments where safety against indirect electrical shocks is required, industrial socket supply, tiny conductive areas supply ...



Sample connection

Secondary 115 or 230 V, serial - parallel connection by 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 25 KVA.  
Insulation voltage values:  
- 4500 V between windings,  
- 2250 V between windings and earth,  
- 1800 V between secondary and earth.  
Ambiant temperature: 25°C.

### 2.1 Conformities

Compliance with IEC 61558-2-4 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,  
- protection caliber device (fuse or Mcb),  
- currents,  
- rating,  
- standard,  
- frequency,  
- Ucc.

Secondary coupling diagram on magnetic core.

#### 2.3.2 Magnetic core

In silicon magnetic steel sheet.  
OW6 core quality from 10 KVA to 25 KVA.

#### 2.3.3 Connection

Terminal blocs (cage system) or busbar and eyelet.

## 3. RANGE / ELECTRICAL CHARACTERISTICS

Primary: 230 V - 400 V.

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

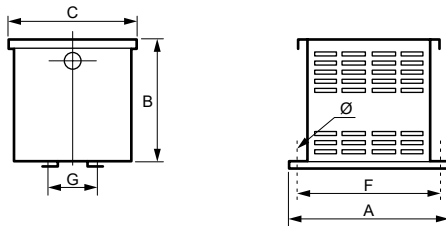
Cats. Nos.	Rating (VA)	Losses		Voltage drop	Efficiency at reference T° cos φ = 1 (%)	Ucc (%)	Primary terminals (mm <sup>2</sup> )	Secondary terminals (mm <sup>2</sup> )
		No load losses (W)	Due to load losses at reference T° (W)					
0425 17	1600	60.2	32	1.62	94.6	1.6	6	6
0425 18	2500	88.8	47	1.67	94.9	2.2	10	10
0425 55	4000	95	102	2.15	95.3	1.8	10	16
0425 56	5000	149	130	2.06	93.9	1.7	10	16
0425 57	6300	149	177	2.22	95.1	1.9	10	16
0425 58	8000	158	194	2.00	95.7	1.8	16	35
1425 59	10000	135	318	2.91	95.7	2.2	16	35
1425 60	12500	135	353	2.59	96.2	2.1	16	35
1425 61	16000	135	373	2.13	96.9	2.2	35	10 <sup>(2)</sup>
1425 62	20000	148	690	3.45	96	4	8 <sup>(1)</sup>	10 <sup>(2)</sup>
1425 63	25000	189	736	2.95	96.4	3.4	8 <sup>(1)</sup>	10 <sup>(2)</sup>

(1) Screw Ø 8 / section 35 mm<sup>2</sup>.

(2) Screw Ø 10 / section 70 mm<sup>2</sup>.

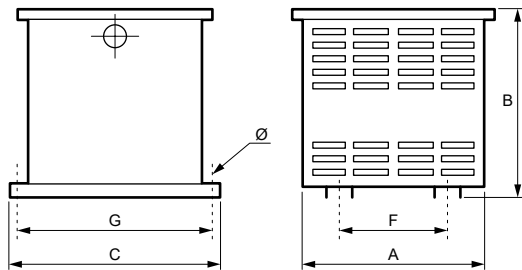
## 4. DIMENSIONS

### 4.1 Rating 1.6 kVA to 8 kVA



Cats. Nos.	Rating (VA)	Dimensions (mm)			Fixing (mm)			Weight (Kg)
		A	B	C	F	G	Ø	
0425 17	1600	250	270	253	230	140	7	25
0425 18	2500	320	330	253	300	111	9	33
0425 55	4000	340	410	320	320	130	9	49
0425 56	5000	340	410	320	320	180	9	65
0425 57	6300	340	410	320	320	180	9	74
0425 58	8000	390	460	380	370	150	9	88

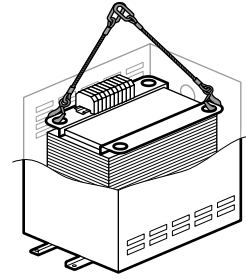
### 4.2 Rating 10 to 25 kVA



Cats. Nos.	Rating (VA)	Dimensions (mm)			Fixing (mm)			Weight (Kg)
		A	B	C	F	G	Ø	
1425 59	10000	431	650	440	411	146	11	70
1425 60	12500	431	650	440	411	146	11	75
1425 61	16000	431	650	440	411	146	11	93
1425 62	20000	530	560	540	240	510	12	105
1425 63	25000	530	560	540	240	510	12	124

## 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 <sup>(1)</sup>.

Rating	230V Mono				400V Mono			
	aM type fuse		D type Mcb		aM type fuse		D type Mcb	
1600 VA	10A	0 130 10	16A	4 080 15	6A	0 130 06	10A	4 080 14
2500 VA	16A	0 130 16	25A	4 080 17	10A	0 130 10	16A	4 080 15
4 kVA	25A	0 130 25	32A	4 080 18	16A	0 130 16	20A	4 080 16
5 kVA	32A	4 080 16	40A	4 080 19	16A	0 130 16	25A	4 080 17
6.3 kVA	32A	0 140 32	50A	4 080 20	20A	0 130 20	32A	4 080 18
8 kVA	40A	0 140 40	63A	4 080 21	25A	0 130 25	40A	4 080 19
10 kVA	63A	0 150 63	80A	4 094 58	32A	0 140 32	50A	4 080 20
12.5 kVA	63A	0 150 63	100A	4 094 59	40A	0 140 40	63A	4 080 21
16 kVA	80A	0 150 80	160A	4 200 07	50A	0 140 50	80A	4 094 58
20 kVA	100A	0 150 96	160A	4 200 07	63A	0 150 63	100A	4 094 59
25 kVA	125A	0 150 97	200A	4 202 08	80A	0 150 80	125A	4 094 60

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

Secondary side protection.

Rating	115V				230V			
	Caliber	Fuse	Caliber	Mcb	Caliber	Fuse	Caliber	Mcb
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
5 kVA	40	0 143 40	40	4 077 04	20	0 133 20	20	4 077 01
6.3 kVA	50	0 143 50	50	4 076 59	25	0 133 25	25	4 077 02
8 kVA	80	0 153 80	80	4 091 40	32	0 143 32	32	4 077 03
10 kVA	80	0 153 80	80	4 091 40	40	0 143 40	40	4 077 04
12.5 kVA	100	0 153 96	100	4 091 41	50	0 143 50	50	4 076 59
16 kVA	160	0 163 55	160	4 200 47	80	0 153 80	80	4 091 40
20 kVA	160	0 163 55	200	4 202 08	80	0 153 80	80	4 091 40
25 kVA	200	0 168 60	250	4 202 09	100	0 153 96	100	4 091 41

## 7. ADDITIONAL CHARACTERISTICS

### 7.1 Calorific potential (Mega Joules)

Cats. Nos	P.Cal. (MJ)
0 425 17	190
0 425 18	465
0 425 55	335
0 425 56	375
0 425 57	450
0 425 58	510
1 425 59	650
1 425 60	740
1 425 61	990
1 425 62	1240
1 425 63	1420

### 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	+	
	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 %	+	
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	++