

# Single phase swimming-pool transformers IP-20



Single phase safety and isolating transformer with galvanic isolation between primary and secondary for swimming pool, garden spotlights, saunas and illuminated fountains.

Wounds totally protected against mechanical chocks and adverse environments.

Maximum security against electrical shocks, all live parts are protected and not accessible.

It provides several taps in the primary winding in order to compensate for the voltage drop in the transformer-spotlight line according to distance.


Screw fixing and possible horizontal mounting designed for placing in cabinets with reduced height (series CPEH).

Core with antioxidant protection.

Connections by screws with self-lifting supporting washers.

Protect the terminal connections intended to avoid the risk of electrical contact accident.

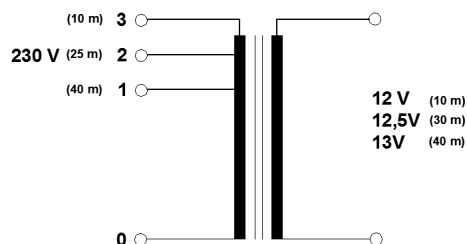
## Technical characteristics

|                     |   |
|---------------------|---|
| Power rating        | 100, 300 and 600 VA   |
| Input voltage       | 230 V   |
| Output voltage      | 12 V  |
| Frequency           | 50/60 Hz  |
| Ambient temperature | 40 °C   |
| Insulation class    | F (155 °C)  |
| Protection degree   | IP-20   |
| Safety class        | Class II  |
| Test voltage        | 4 kV  |
| Standards           | IEC/UNE-EN 61558-1  |

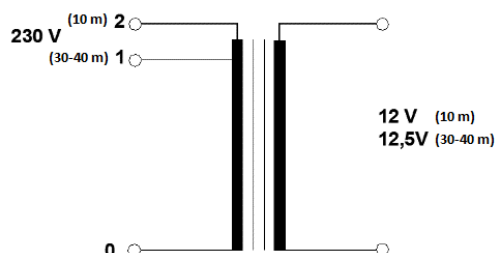


IEC /UNE-EN 61558-2-6

### Electrical diagram (100 VA y 600 VA)



### Electrical diagram (300 VA)



**Selection table**

| Rated transformer | Rated spotlight | Distance between spotlight and transformer |          |           |                                      |           |                                 |
|-------------------|-----------------|--|----------|-----------|--------------------------------------|-----------|---------------------------------|
|                   |                 | Wire section 2.5 mm <sup>2</sup>           |          |           | Wire section 4 mm <sup>2</sup>       |           |                                 |
| 100 VA            | 100 W           | 1 a 6 m                                    | 6 a 15 m | 15 a 24 m | 1 a 10 m                             | 10 a 25 m | 30 a 25 m                       |
|                   |                 | Wire section 6 mm <sup>2</sup>             |          |           | Wire section 10 mm <sup>2</sup>      |           | Wire section 16 mm <sup>2</sup> |
| 300 VA            | 300W            | 1 a 6 m                                    | 6 a 15 m | -         | 1 a 10 m                             | 10 a 30 m | 30 a 40 m                       |
|                   |                 | (x2) Wire section 6 mm <sup>2</sup>        |          |           | (x2) Wire section 10 mm <sup>2</sup> |           |                                 |
| 600 VA            | 2 x 300 W       | 1 a 6 m                                    | 6 a 15 m | 15 a 24 m | 1 a 10 m                             | 10 a 25 m | 25 a 40 m                       |

|   |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|
| Terminal connection 230V (100VA, 600VA) | 0 - 3 | 0 - 2 | 0 - 1 | 0 - 3 | 0 - 2 | 0 - 1 |
| Terminal connection 230V (300 VA)       | 0-2   | 0-1   | -     | 0-2   | 0-1   | -     |

It is recommended a protection against short circuits via fuse, installed in series at the primary circuit.

Fuses selected must be slow-blow or time-delay types because the high inrush current when the transformer is connected

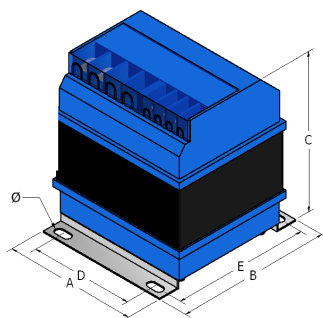
| Power Rating | Fuse 230V |
|--------------|-----------|
| 100 VA       | T 0,63A   |
| 300 VA       | T 1,6A    |
| 600 VA       | T 3,15A   |

### Series CPE Vertical mounting

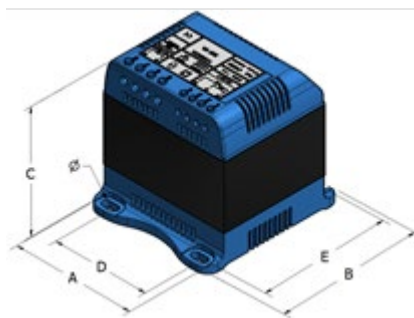
| Rating VA | Reference | Dimensions mm |     |     |    |     |      | Weight Kg | Type |
|-----------|-----------|---------------|-----|-----|----|-----|------|-----------|------|
|           |           | A             | B   | C   | D  | E   | Ø    |           |      |
| 100       | CPE100    | 94            | 106 | 105 | 58 | 90  | 7x14 | 1,9       | I    |
| 300       | CPEN300   | 108           | 120 | 112 | 80 | 106 | 7x14 | 4,0       | II   |
| 600       | CPE600    | 135           | 148 | 172 | 91 | 132 | 7x15 | 7,6       | I    |

### Series CPEH Horizontal mounting

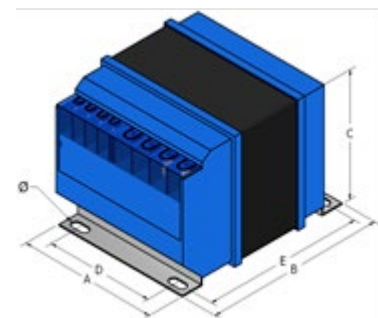
| Rating VA | Reference | Dimensions mm |     |     |    |     |      | Weight Kg | Type |
|-----------|-----------|---------------|-----|-----|----|-----|------|-----------|------|
|           |           | A             | B   | C   | D  | E   | Ø    |           |      |
| 100       | CPEH100   | 94            | 116 | 83  | 58 | 100 | 7X14 | 1,9       | III  |
| 600       | CPEH600   | 135           | 182 | 117 | 91 | 166 | 7x15 | 7,6       | III  |



Type I



Type II



Type III

\* Other features, power, voltage, etc., on request.

\* Torytrans reserves the right to modify the information in any time and without prior notice.