



## **SECTION 6**

# **HPS UNIVERSAL™ LOW VOLTAGE LIGHTING TRANSFORMERS**

### **Encapsulated Single Phase Enclosed**

<b>Single Phase Applications &amp; Standard Specifications....</b>	<b>154</b>
<b>Group A Selection Table .....</b>	<b>155</b>
<b>Group B Selection Table .....</b>	<b>155</b>
<b>Group C Selection Table .....</b>	<b>155</b>
<b>Enclosure Drawings .....</b>	<b>228</b>

## SINGLE PHASE LOW VOLTAGE TRANSFORMER APPLICATIONS

For a cost effective approach to supply low voltage for recreational, lighting, light duty industrial and pool and spa applications or for a general purpose load including actuating relays, bells, control and low voltage circuits, these type 3R style encapsulated transformers are specifically designed for the following applications;

- General purpose applications used to adjust a supply voltage to match load equipment.
- Supplying machine tool circuits.
- Actuating relays, bells, signal and alarm systems.
- Operating small motors, valves and dampers.
- Industrial lighting and circuit isolation.
- Pool and spa (must be ordered in a type 4X stainless steel enclosure. Only available up to 1000VA as 60 Hz unit.)

HPS single phase encapsulated control transformers, with ratings from 50VA up to 5000VA in three voltage ratings, feature the newest technology and manufacturing processes.



## LOW VOLTAGE LIGHTING TRANSFORMER STANDARD SPECIFICATIONS

	15 to 333 kVA	15 to 1500 kVA
<b>UL Listed</b>	File: E50394	File: E50394
<b>CSA Certified</b>	File: LR3902	File: LR3902
<b>Frequency</b>	50/60 Hz	50/60 Hz
<b>Insulation System</b>	130°C (80°C rise)	180°C (115°C rise)
<b>Standard Design</b>	Single phase, core construction made with high quality, high permeability silicon steel laminations. Computer designed coils are accurately wound from high quality copper magnetic wire.	Single phase, core construction made with high quality, high permeability silicon steel laminations. Computer designed coils are accurately wound from high quality copper magnetic wire.
<b>Encapsulation</b>	All units from 50VA to 5kVA are encapsulated with electrical grade silica sand and resin compounds.	All units from 50VA to 5kVA are encapsulated with electrical grade silica sand and resin compounds.
<b>Enclosure Type</b>	Heavy duty encapsulated type 3R optional type 4, 4X (stainless) & 12 available	Heavy duty encapsulated type 3R optional type 4, 4X (stainless) & 12 available
<b>Termination</b>	ANSI 61 Grey, UL50	ANSI 61 Grey, UL50
<b>Conduit Knock-Outs</b>	Side and rear standard on all units (no knock-outs on Stainless Steel enclosures).	Side and rear standard on all units (no knock-outs on Stainless Steel enclosures).
<b>Mounting</b>	Standard wall mounting.	Standard wall mounting.

## Single Phase Specification Tables



### Group A

Primary Voltage: 120/240

Secondary Voltage: 12/24

50/60 Hertz

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall	Wiring Diagram (Page 243)
			Width	Depth	Height			
50	QC05ERCB	NQ0	3.75	5.25	7.25	6	W	SCD 1
100	QC10ERCB	NQ0	3.75	5.25	7.25	7	W	SCD 1
150	QC15ERCB	NQ0	3.75	5.25	7.25	8	W	SCD 1
200	QC20ERCB	NQ1	4.50	5.75	7.25	11	W	SCD 1
250	QC25ERCB	NQ1	4.50	5.75	7.25	13	W	SCD 1
350	QC35ERCB	NQ1	4.50	5.75	7.25	14	W	SCD 1
500	QC50ERCB	NQ2	5.00	4.75	9.25	15	W	SCD 1
750	QC75ERCB	NQ2	5.00	4.75	9.25	18	W	SCD 1
1000	Q1C0ERCB	NQ3	5.88	5.50	10.50	25	W	SCD 1
1500	Q1C5ERCF	NQ4	7.00	6.50	11.75	36	W	SCD 1
2000	Q002ERCF	NQ4	7.00	6.50	11.75	46	W	SCD 1
3000	Q003ERCF	NQ5	10.00	7.75	17.25	65	W	SCD 1
5000	Q005ERCF	NQ5	10.00	7.75	17.25	105	W	SCD 1

### Group B

Primary Voltage: 120/240

Secondary Voltage: 16/32

50/60 Hertz

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall	Wiring Diagram (Page 243)
			Width	Depth	Height			
50	QC05ESCB	NQ0	3.75	5.25	7.25	6	W	SCD 1
100	QC10ESCB	NQ0	3.75	5.25	7.25	7	W	SCD 1
150	QC15ESCB	NQ0	3.75	5.25	7.25	8	W	SCD 1
200	QC20ESCB	NQ1	4.50	5.75	7.25	11	W	SCD 1
250	QC25ESCB	NQ1	4.50	5.75	7.25	13	W	SCD 1
350	QC35ESCB	NQ1	4.50	5.75	7.25	14	W	SCD 1
500	QC50ESCB	NQ2	5.00	4.75	9.25	15	W	SCD 1
750	QC75ESCB	NQ2	5.00	4.75	9.25	18	W	SCD 1
1000	Q1C0ESCB	NQ3	5.88	5.50	10.50	25	W	SCD 1
1500	Q1C5ESCF	NQ4	7.00	6.50	11.75	36	W	SCD 1
2000	Q002ESCF	NQ4	7.00	6.50	11.75	46	W	SCD 1
3000	Q003ESCF	NQ5	10.00	7.75	17.25	65	W	SCD 1
5000	Q005ESCF	NQ5	10.00	7.75	17.25	105	W	SCD 1

### Group C

Primary Voltage: 240/480

Secondary Voltage: 24/48

50/60 Hertz

VA	Catalog Number	Case Style (Page 228)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall	Wiring Diagram (Page 243)
			Width	Depth	Height			
50	QC05DTCB	NQ0	3.75	5.25	7.25	6	W	SCD 1
100	QC10DTCB	NQ0	3.75	5.25	7.25	7	W	SCD 1
150	QC15DTCB	NQ0	3.75	5.25	7.25	8	W	SCD 1
200	QC20DTCB	NQ1	4.50	5.75	7.25	11	W	SCD 1
250	QC25DTCB	NQ1	4.50	5.75	7.25	13	W	SCD 1
350	QC35DTCB	NQ1	4.50	5.75	7.25	14	W	SCD 1
500	QC50DTCB	NQ2	5.00	4.75	9.25	15	W	SCD 1
750	QC75DTCB	NQ2	5.00	4.75	9.25	18	W	SCD 1
1000	Q1C0DTCB	NQ3	5.88	5.50	10.50	25	W	SCD 1
1500	Q1C5DTCF	NQ4	7.00	6.50	11.75	36	W	SCD 1
2000	Q002DTCF	NQ4	7.00	6.50	11.75	46	W	SCD 1
3000	Q003DTCF	NQ5	10.00	7.75	17.25	65	W	SCD 1
5000	Q005DTCF	NQ5	10.00	7.75	17.25	105	W	SCD 1



