

# Electronic Fluorescent Ballasts

ELECTRONIC BALLASTS

| Item Number   | OSRAM SYLVANIA Description                           | Input Voltage (VAC) | Input Current (AMPS)     | Lamp Type                 | Rated Lumens (lm) | No. of Lamps | Ballast Factor (BF)      | System Lumens            | Mean Lumens              | Input Wattage (W)        | System Efficacy (lm/W)   |
|---|--|---------------------|--------------------------|---------------------------|-------------------|--------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <b>QUICKTRONIC® HIGH EFFICIENCY 32 T8 PROStart® UNIVERSAL VOLTAGE SYSTEMS</b>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>HIGH BALLAST FACTOR (90°C Case Temperature – Parallel Operation)<sup>1</sup></b>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 49450 ☼<br>49459  | QHE2x32T8/UNV-PSH-HT<br>Banded Pack<br>Pallet Pack   | 120-277             | 0.63/0.27                | F032/700                  | 2800              | 2            | 1.15                     | 6440                     | 5795                     | 75/74                    | 86/87                    |
|   |  |                     | 0.63/0.27                | F032/XP                   | 3000              | 2            | 1.15                     | 6900                     | 6555                     | 75/74                    | 92/93                    |
|   |  |                     | 0.60/0.25                | F030/SS                   | 2830              | 2            | 1.15                     | 6510                     | 6185                     | 70/69                    | 93/94                    |
|   |  |                     | <b>0.55/0.24</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>2</b>     | <b>1.15</b>              | <b>6270</b>              | <b>5955</b>              | <b>66/65</b>             | <b>95/96</b>             |
|   |  |                     | 0.50/0.21                | F025/SS                   | 2475              | 2            | 1.15                     | 5695                     | 5410                     | 59/58                    | 96/98                    |
| 49453 ☼<br>49460  | QHE3x32T8/UNV-PSH-HT<br>Banded Pack<br>Pallet Pack   | 120-277             | 0.94/0.40                | F032/700                  | 2800              | 3            | 1.15                     | 9660                     | 8695                     | 110/109                  | 88/89                    |
|   |  |                     | 0.94/0.40                | F032/XP                   | 3000              | 3            | 1.15                     | 10,350                   | 9830                     | 110/109                  | 94/95                    |
|   |  |                     | 0.88/0.38                | F030/SS                   | 2830              | 3            | 1.15                     | 9765                     | 9275                     | 103/102                  | 95/96                    |
|   |  |                     | <b>0.82/0.35</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>3</b>     | <b>1.15</b>              | <b>9400</b>              | <b>8930</b>              | <b>96/95</b>             | <b>98/99</b>             |
|   |  |                     | 0.73/0.31                | F025/SS                   | 2475              | 3            | 1.15                     | 8540                     | 8110                     | 86/85                    | 99/100                   |
| 49455 ☼<br>49470  | QHE4x32T8/UNV-PSH-HT<br>Banded Pack<br>Pallet Pack   | 120-277             | 1.24/0.53                | F032/700                  | 2800              | 4            | 1.15                     | 12,880                   | 11,590                   | 146/144                  | 88/89                    |
|   |  |                     | 1.24/0.53                | F032/XP                   | 3000              | 4            | 1.15                     | 13,800                   | 13,110                   | 146/144                  | 95/96                    |
|   |  |                     | 1.16/0.50                | F030/SS                   | 2830              | 4            | 1.15                     | 13,020                   | 13,370                   | 137/135                  | 95/96                    |
|   |  |                     | <b>1.09/0.46</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>4</b>     | <b>1.15</b>              | <b>12,535</b>            | <b>11,910</b>            | <b>128/126</b>           | <b>98/99</b>             |
|   |  |                     | 0.97/0.41                | F025/SS                   | 2475              | 4            | 1.15                     | 11,385                   | 10,815                   | 114/113                  | 100/101                  |
| <i>PROStart® QHE PSH models above also operate these lamps: F032, F031, F030/SS (30W) &amp; F029/SS (29W)</i>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>QUICKTRONIC HIGH EFFICIENCY 32 T8 INSTANT START UNIVERSAL VOLTAGE SYSTEMS</b>  |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>NORMAL BALLAST FACTOR - UL Type CC - Lamp Striation Control/LSC<sup>1</sup></b>  |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 49381<br>49382  | QHE1x32T8/UNV-ISN-SC-1<br>Banded Pack<br>Pallet Pack | 120-277             | 0.25/0.11                | F032/700                  | 2800              | 1            | 0.87                     | 2435                     | 2190                     | 28                       | 87                       |
|   |  |                     | 0.25/0.11                | F032/XP                   | 3000              | 1            | 0.87                     | 2610                     | 2480                     | 28                       | 93                       |
|   |  |                     | 0.23/0.09                | F030/SS                   | 2850              | 1            | 0.87                     | 2480                     | 2355                     | 27/26                    | 92/95                    |
|   |  |                     | <b>0.21/0.09</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>1</b>     | <b>0.87</b>              | <b>2370</b>              | <b>2250</b>              | <b>25/24</b>             | <b>95/99</b>             |
|   |  |                     | 0.20/0.90                | F025/SS                   | 2475              | 1            | 0.87                     | 2155                     | 2045                     | 23/22                    | 94/98                    |
| 49383<br>49384  | QHE2x32T8/UNV-ISN-SC-1<br>Banded Pack<br>Pallet Pack | 120-277             | 0.47/0.20                | F032/700                  | 2800              | 2            | 0.87                     | 4870                     | 4385                     | 55                       | 89                       |
|   |  |                     | 0.47/0.20                | F032/XP                   | 3000              | 2            | 0.87                     | 5220                     | 4960                     | 55                       | 95                       |
|   |  |                     | 0.44/0.19                | F030/SS                   | 2850              | 2            | 0.87                     | 4960                     | 4710                     | 52                       | 95                       |
|   |  |                     | <b>0.40/0.18</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>2</b>     | <b>0.87</b>              | <b>4740</b>              | <b>4500</b>              | <b>48/47</b>             | <b>99/101</b>            |
|   |  |                     | 0.37/0.16                | F025/SS                   | 2475              | 2            | 0.87                     | 4305                     | 4090                     | 44/43                    | 98/100                   |
| 49385<br>49386  | QHE3x32T8/UNV-ISN-SC-1<br>Banded Pack<br>Pallet Pack | 120-277             | 0.68/0.30                | F032/700                  | 2800              | 3            | 0.87                     | 7305                     | 6940                     | 82/81                    | 89/90                    |
|   |  |                     | 0.68/0.30                | F032/XP                   | 3000              | 3            | 0.87                     | 7830                     | 7440                     | 82/81                    | 96/97                    |
|   |  |                     | 0.65/0.28                | F030/SS                   | 2850              | 3            | 0.87                     | 7440                     | 7070                     | 77/76                    | 97/98                    |
|   |  |                     | <b>0.61/0.26</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>3</b>     | <b>0.87</b>              | <b>7110</b>              | <b>6755</b>              | <b>72/71</b>             | <b>99/100</b>            |
|   |  |                     | 0.55/0.23                | F025/SS                   | 2475              | 3            | 0.87                     | 6460                     | 6135                     | 65/64                    | 99/101                   |
| 49387<br>49388  | QHE4x32T8/UNV-ISN-SC-1<br>Banded Pack<br>Pallet Pack | 120-277             | 0.92/0.39                | F032/700                  | 2800              | 4            | 0.87                     | 9745                     | 9255                     | 109/107                  | 89/91                    |
|   |  |                     | 0.92/0.39                | F032/XP                   | 3000              | 4            | 0.87                     | 10,440                   | 9920                     | 109/107                  | 96/98                    |
|   |  |                     | 0.86/0.37                | F030/SS                   | 2850              | 4            | 0.87                     | 9920                     | 9425                     | 102                      | 97                       |
|   |  |                     | <b>0.80/0.35</b>         | <b>F028/SS</b>            | <b>2725</b>       | <b>4</b>     | <b>0.87</b>              | <b>9485</b>              | <b>9010</b>              | <b>95/94</b>             | <b>100/101</b>           |
|   |  |                     | 0.74/0.31                | F025/SS                   | 2475              | 4            | 0.87                     | 8615                     | 8185                     | 87/86                    | 99/100                   |
| <i>Instant Start QHE ISN models above also operate these lamps: F032, F031, F025, F024, F017, F016, F030/SS (30W), F029/SS (29W) &amp; F040T8</i>                                     |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>QUICKTRONIC HIGH EFFICIENCY 59 T8 (8 foot) INSTANT START UNIVERSAL VOLTAGE SYSTEMS</b>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>LOW BALLAST FACTOR<sup>2</sup></b>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 50239*<br>49869<br>49870  | QHE2x59T8/UNV-ISL-SC<br>10-Pack<br>Pallet Pack       | 120-277             | 0.80/0.34                | F096T8/700 (59W)          | 5700              | 2            | 0.77                     | 8780                     | 7900                     | 95/94                    | 92/93                    |
|   |  |                     | 0.80/0.34                | F096T8/XP (59W)           | 6100              | 2            | 0.77                     | 9380                     | 8910                     | 95/94                    | 99/100                   |
|   |  |                     | <b>0.74/0.32</b>         | <b>F096T8/XP/SS (55W)</b> | <b>5700</b>       | <b>2</b>     | <b>0.77</b>              | <b>8780</b>              | <b>8340</b>              | <b>89/88</b>             | <b>99/100</b>            |
| <b>NORMAL BALLAST FACTOR<sup>2</sup></b>  |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 50237*<br>49859<br>49860  | QHE2x59T8/UNV-ISN-SC<br>10-Pack<br>Pallet Pack       | 120-277             | 0.92/0.40                | F096T8/700 (59W)          | 5700              | 2            | 0.88                     | 10,030                   | 9025                     | 109/107                  | 92/94                    |
|   |  |                     | 0.92/0.40                | F096T8/XP (59W)           | 6100              | 2            | 0.88                     | 10,735                   | 10,200                   | 109/107                  | 98/100                   |
|   |  |                     | <b>0.84/0.36</b>         | <b>F096T8/XP/SS (55W)</b> | <b>5700</b>       | <b>2</b>     | <b>0.88</b>              | <b>10,030</b>            | <b>9530</b>              | <b>102/100</b>           | <b>99/100</b>            |
| <b>HIGH BALLAST FACTOR<sup>2</sup></b>  |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 50238*<br>49879<br>49880  | QHE2x59T8/UNV-ISH<br>10-Pack<br>Pallet Pack          | 120-277             | 1.20/0.52                | F096T8/700 (59W)          | 5700              | 2            | 1.15                     | 13,110                   | 11,800                   | 144/141                  | 91/93                    |
|   |  |                     | 1.20/0.52                | F096T8/XP (59W)           | 6100              | 2            | 1.15                     | 14,030                   | 13,330                   | 144/141                  | 97/100                   |
|   |  |                     | <b>1.08/0.47</b>         | <b>F096T8/XP/SS (55W)</b> | <b>5700</b>       | <b>2</b>     | <b>1.15</b>              | <b>13,110</b>            | <b>12,455</b>            | <b>134/131</b>           | <b>98/100</b>            |
| <i>QHE2x59T8-ISL-SC and QHE2x59T8-ISN-SC models also operate these lamps: F072T8 &amp; F048T8</i>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>QUICKTRONIC PROFESSIONAL 59 T8 (8 foot) INSTANT START UNIVERSAL VOLTAGE SYSTEMS</b>  |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>NORMAL BALLAST FACTOR<sup>2</sup></b>  |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 49590*<br>49598<br>49599  | QTP 2x59T8/UNV ISN-SC<br>10-Pack<br>Pallet Pack      | 120-277             | 0.93/0.40                | F096T8/700 (59W)          | 5700              | 2            | 0.88                     | 10,030                   | 9027                     | 112/110                  | 90/91                    |
|   |  |                     | 0.93/0.40                | F096T8/XP (59W)           | 6100              | 2            | 0.88                     | 10,735                   | 10,200                   | 112/110                  | 96/98                    |
|   |  |                     |                          | <b>F096T8/XP/SS (55W)</b> | <b>5700</b>       | <b>2</b>     | <b>0.88</b>              | <b>10,030</b>            | <b>9530</b>              | <b>104/102</b>           | <b>96/98</b>             |
| <i>Instant Start QTP ISN models above also operate these lamps: F072T8 &amp; F048T8</i>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>QUICKTRONIC HIGH EFFICIENCY 86 T8/HO (8 foot) PROStart UNIVERSAL VOLTAGE SYSTEMS</b>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| <b>NORMAL BALLAST FACTOR (90°C Case Temperature – Parallel Operation)<sup>2</sup></b>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 50304 ☼*<br>50305   | QHE 2x86T8HO/UNV-PSN-HT-SCL<br>Pallet Pack           | 120-277             | <input type="checkbox"/> | F096T8/700/HO             | 8000              | 2            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|   |  |                     | <input type="checkbox"/> | F096T8/800/HO             | 8200              | 2            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <i>PROStart® QHE 2x86T8HO also operates these lamps: F72, F60T8HO &amp; F48T8HO</i>   |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |
| 1: Mean Lumens @ 8000 hours, 2: Mean Lumens for T8 (8 foot) @ 6000 hours, *10 Piece Banded Pack Item Number, <input type="checkbox"/> Contact OSRAM SYLVANIA for product information. |  |                     |                          |                           |                   |              |                          |                          |                          |                          |                          |

The smart electronics in SYLVANIA QUICKTRONIC® ballasts allow them to outperform the competition.

| Item Number  | OSRAM SYLVANIA              | Advance                   | U.L.T.<br>Universal Lighting Technologies<br>(formerly Magnetek) | GE                 | Howard              |
|--|-----------------------------|---------------------------|--|--------------------|---------------------|
| <b>QUICKTRONIC HIGH EFFICIENCY 32 T8 PROStart® UNIVERSAL VOLTAGE SYSTEMS</b>                           |                             |                           |  |                    |                     |
| 32 T8 Programmed Rapid Start - High Ballast Factor (90°C Case Temperature - Parallel Operation)        |                             |                           |  |                    |                     |
| 49450  | QHE2x32T8/UNV-PSH-HT        | N/A                       | N/A  | GE-232-MV-PS-H     | N/A                 |
| 49453  | QHE3x32T8/UNV-PSH-HT        | N/A                       | N/A  | GE-332-MV-PS-H     | N/A                 |
| 49455  | QHE4x32T8/UNV-PSH-HT        | N/A                       | N/A  | GE-432-MV-PS-H     | N/A                 |
| <b>QUICKTRONIC HIGH EFFICIENCY 32 T8 INSTANT START UNIVERSAL VOLTAGE SYSTEMS</b>                       |                             |                           |  |                    |                     |
| 32 T8 Instant Start - Normal Ballast Factor - UL Type CC - Lamp Striation Control/LSC                  |                             |                           |  |                    |                     |
| 49381  | QHE1x32T8/UNV-ISN-SC-1      | IOP-1P32-SC               | N/A  | GE-132-MAX-N/ULTRA | N/A                 |
| 49383  | QHE2x32T8/UNV-ISN-SC-1      | IOP-2P32-SC               | N/A  | GE-232-MAX-N/ULTRA | N/A                 |
| 49385  | QHE3x32T8/UNV-ISN-SC-1      | IOP-3P32-SC               | N/A  | GE-332-MAX-N/ULTRA | N/A                 |
| 49387  | QHE4x32T8/UNV-ISN-SC-1      | IOP-4P32-SC               | N/A  | GE-432-MAX-N/ULTRA | N/A                 |
| <b>QUICKTRONIC HIGH EFFICIENCY 59 T8 &amp; QUICKTRONIC PROFESSIONAL 8 FOOT UNIVERSAL VOLTAGE</b>       |                             |                           |  |                    |                     |
| 59W F96 T8 Instant Start - Low Ballast Factor - <10% THD   |                             |                           |  |                    |                     |
| 50239  | QHE 2x59T8/UNV-ISL-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 59W F96 T8 Instant Start - Normal Ballast Factor - <10% THD  |                             |                           |  |                    |                     |
| 49859  | QHE 2x59T8/UNV-ISN-SC       | IOP-2P59-SC               | N/A  | GE-259-MAX-N/ULTRA | N/A                 |
| 59W F96 T8 Instant Start - High Ballast Factor - <10% THD  |                             |                           |  |                    |                     |
| 49879  | QHE 2x59T8/UNV-ISH          | N/A                       | N/A  | N/A                | N/A                 |
| 59W F96 T8 Instant Start - Normal Ballast Factor - <10% THD - Universal Voltage                        |                             |                           |  |                    |                     |
| 49598  | QTP 2X59T8/UNV ISN-SC       | N/A                       | B259IUHVHP-A   | GE-259-MV-N        | N/A                 |
| <b>QUICKTRONIC HIGH EFFICIENCY 86 T8/HO (8 FOOT) PROSTART UNIVERSAL VOLTAGE SYSTEMS</b>                |                             |                           |  |                    |                     |
| 86W F96 T8/HO (8 foot) PROStart® - Normal Ballast Factor -(90°C Case Temperature - Parallel Operation) |                             |                           |  |                    |                     |
| 50304  | QHE 2x86T8HO/UNV-PSN-HT-SCL | ICN-2S86                  | N/A  | N/A                | N/A                 |
| <b>QUICKTRONIC HIGH EFFICIENCY, PROFESSIONAL &amp; T8 INSTANT START 347 VOLT - CANADA</b>              |                             |                           |  |                    |                     |
| 32 T8 High Efficiency Instant Start- Normal Ballast Factor - Small Can - <10% THD                      |                             |                           |  |                    |                     |
| 49461  | QHE 1x32T8/347 ISN-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49463  | QHE 2x32T8/347 ISN-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49465  | QHE 3x32T8/347 ISN-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49467  | QHE 4x32T8/347 ISN-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 32 T8 High Efficiency Instant Start- Low Ballast Factor - Small Can - <10% THD                         |                             |                           |  |                    |                     |
| 49471  | QHE 1x32T8/347 ISL-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49473  | QHE 2x32T8/347 ISL-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49475  | QHE 3x32T8/347 ISL-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49477  | QHE 4x32T8/347 ISL-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 32 T8 Instant Start- Normal Ballast Factor - Small Can - <10% THD                                      |                             |                           |  |                    |                     |
| 49711  | QTP 1x32T8/347 ISN-SC       | N/A                       | N/A  | N/A                | N/A                 |
| 49713  | QTP 2x32T8/347 ISN-SC       | N/A                       | B2321347HP-A   | N/A                | N/A                 |
| 32 T8 Instant Start- Low Ballast Factor - Small Can - <20% THD - Small Can/Standard "F" Can            |                             |                           |  |                    |                     |
| 49241  | QT 2x32T8/347 ISL-SC        | GEL-2P32-LW-RH-TP (F-Can) | B2321347L-A  | N/A                | N/A                 |
| 49939  | QT 4x32T8/347 ISL-SC        | N/A                       | N/A  | N/A                | N/A                 |
| 32 T8 Instant Start- Normal Ballast Factor - Small Can - <20% THD - Small Can/Standard "F" Can         |                             |                           |  |                    |                     |
| 49993  | QT 3x32T8/347 ISN-SC        | GEL-3P32-RH-TP (F-Can)    | B3321347RH (F-Can)   | N/A                | E3/32IS/347 (F-Can) |
| 49994  | QT 4x32T8/347 ISN-SC        | GEL-4P32-RH-TP (F-Can)    | B4321347RH (F-Can)   | N/A                | E4/32IS-347 (F-Can) |
| 32 T8 Instant Start- High Ballast Factor - Small Can - <20% THD  |                             |                           |  |                    |                     |
| 49927  | QT 2x32T8/347 ISH-SC        | N/A                       | N/A  | N/A                | N/A                 |
| <b>QUICKTRONIC 59 T8 8 FOOT SYSTEM - 347 VOLT - CANADA</b>   |                             |                           |  |                    |                     |
| 59W F96 T8 Instant Start - Normal Ballast Factor - <20% THD  |                             |                           |  |                    |                     |
| 49217  | QT2x59/347IS                | GEL-2P59                  | N/A  | N/A                | N/A                 |