

## ELXc – Warm Start for T5 and T8 Lamps

Electronic built-in ballasts

Casing: metal

Power factor:  $\geq 0.95$

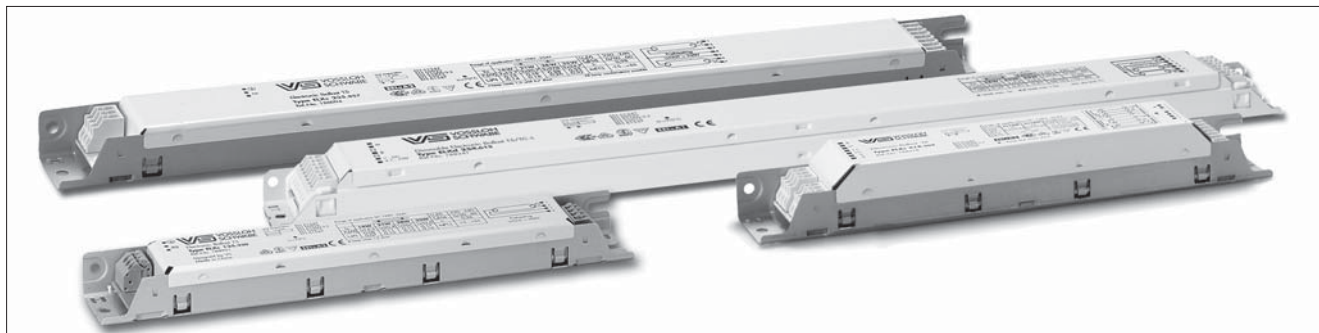
RFI-suppressed

For luminaires of protection class I

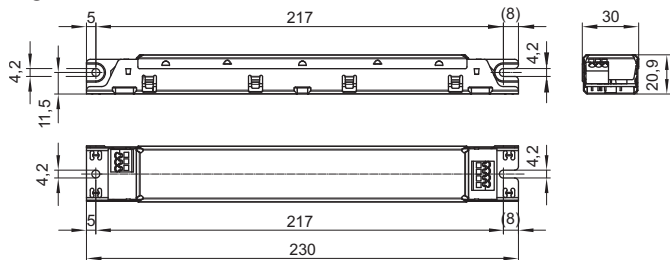
Degree of protection: IP20

For lighting systems with

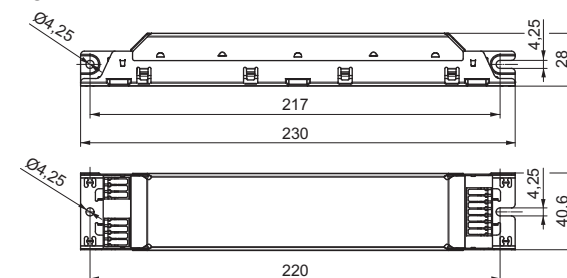
high switching frequency ( $> 5/\text{day}$ )



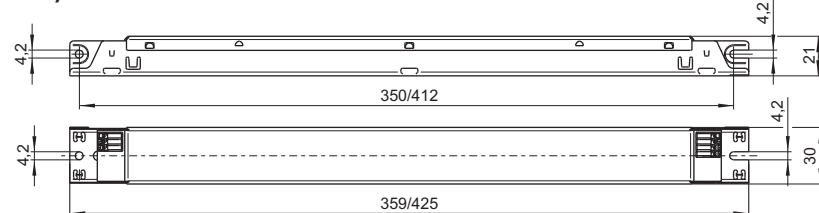
### M6



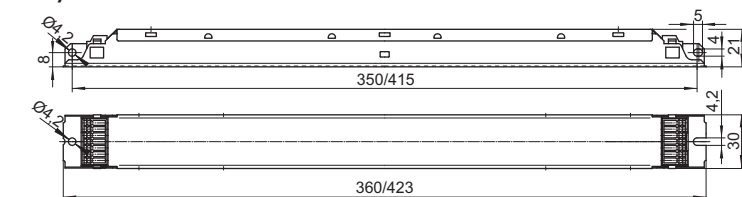
### M8



### M10/M11



### M22/M24



## ELXc – Warm start for T5 lamps with lamp detection

DC voltage

for operation: 176–276 V

for ignition: 198–264 V

Push-in terminals: 0.5–1 mm<sup>2</sup>

For the automatic luminaire wiring:

IDC terminals for leads H05V-U 0.5

EOL shut down approved

acc. to EN 61347 Test 2

Automatic lamp detection (T5 HO/HE)

Optimum pre-heating of the filament ensures  
lamps can be ignited within 1 second.

☒ T5    ☐ TC    ☒ BUILT-IN    ☐ 1–10 V  
☐ T8    ☐ INDEPENDENT    ☐ DALI/PUSH

| Lamp        |      |      |                        | Electronic ballast |               |                                  |                      |                                               |                                              |        | System      |                         |
|-------------|------|------|------------------------|--------------------|---------------|----------------------------------|----------------------|-----------------------------------------------|----------------------------------------------|--------|-------------|-------------------------|
| Output<br>W | Type | Base | Power consumption<br>W | Type               | Ref. No.      | Voltage AC<br>50, 60 Hz<br>V±10% | Energy<br>efficiency | Ambient<br>temperature<br>t <sub>a</sub> (°C) | Casing<br>temperature<br>t <sub>c</sub> (°C) | Casing | Output<br>W | Luminous<br>factor<br>% |
| 14          | T5   | G5   | 1 x 14.0               | ELXc 139.632       | <b>188945</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 16.0        | 100.0                   |
| 2x14        | T5   | G5   | 2 x 14.0               | ELXc 239.635       | <b>188948</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 31.0        | 100.0                   |
| 21          | T5   | G5   | 1 x 21.0               | ELXc 139.632       | <b>188945</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 24.0        | 100.0                   |
| 2x21        | T5   | G5   | 2 x 20.5               | ELXc 239.635       | <b>188948</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 45.0        | 100.0                   |
| 24          | T5   | G5   | 1 x 23.0               | ELXc 139.632       | <b>188945</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 26.0        | 100.0                   |
| 2x24        | T5   | G5   | 2 x 23.0               | ELXc 239.635       | <b>188948</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 50.0        | 100.0                   |
| 28          | T5   | G5   | 1 x 28.0               | ELXc 154.633       | <b>188946</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 32.0        | 100.0                   |
| 2x28        | T5   | G5   | 2 x 28.0               | ELXc 254.636       | <b>188949</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 61.0        | 100.0                   |
| 35          | T5   | G5   | 1 x 35.0               | ELXc 154.633       | <b>188946</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 38.0        | 100.0                   |
|             |      |      | 1 x 35.0               | ELXc 180.634       | <b>188947</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 38.0        | 100.0                   |
|             |      |      | 2 x 35.0               | ELXc 254.636       | <b>188949</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 76.0        | 100.0                   |
| 2x35        | T5   | G5   | 2 x 35.0               | ELXc 280.637       | <b>188950</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M24    | 75.0        | 100.0                   |
| 39          | T5   | G5   | 1 x 38.0               | ELXc 139.632       | <b>188945</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 41.0        | 100.0                   |
| 2x39        | T5   | G5   | 2 x 38.0               | ELXc 239.635       | <b>188948</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 81.0        | 100.0                   |
| 49          | T5   | G5   | 1 x 49.0               | ELXc 154.633       | <b>188946</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 53.0        | 100.0                   |
|             |      |      | 1 x 49.0               | ELXc 180.634       | <b>188947</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 53.0        | 100.0                   |
| 2x49        | T5   | G5   | 2 x 49.0               | ELXc 254.636       | <b>188949</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 105.0       | 100.0                   |
|             |      |      | 2 x 49.0               | ELXc 280.637       | <b>188950</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M24    | 104.0       | 100.0                   |
| 54          | T5   | G5   | 1 x 54.0               | ELXc 154.633       | <b>188946</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 58.0        | 100.0                   |
| 2x54        | T5   | G5   | 2 x 54.0               | ELXc 254.636       | <b>188949</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 115.0       | 100.0                   |
| 80          | T5   | G5   | 1 x 80.0               | ELXc 180.634       | <b>188947</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M22    | 85.0        | 100.0                   |
| 2x80        | T5   | G5   | 2 x 80.0               | ELXc 280.637       | <b>188950</b> | 220–240                          | A2 BAT               | –20 to 50                                     | max. 75                                      | M24    | 165.0       | 100.0                   |

Circuit diagrams see pages 255–259

## ELXc – Warm Start for T5 and T8 Lamps

DC voltage

for operation: 176–264 V

for ignition: 198–264 V

(ELXc 135.856, 235.857, 149.858, 154.864,  
180.866, 270.206; 280.538:

DC voltage cannot be reduced to 176 V)

Push-in terminals: 0.5–1 mm<sup>2</sup>

For the automatic luminaire wiring:

IDC terminals for leads HO5V-U 0.5

EOL shut down approved

acc. to EN 61347 Test 2 (for T5)

EOL shut down (for T8)

☒ T5   ☐ TC   ☒ BUILT-IN   ☐ 1–10 V  
☒ T8   ☐ INDEPENDENT   ☐ DALI/PUSH

| Lamp                                          |      |      |                             | Electronic ballast |               |                                  |                      |                                               |                                              |        | System      |                         |
|-----------------------------------------------|------|------|-----------------------------|--------------------|---------------|----------------------------------|----------------------|-----------------------------------------------|----------------------------------------------|--------|-------------|-------------------------|
| Output<br>W                                   | Type | Base | Power con-<br>sumption<br>W | Type               | Ref. No.      | Voltage AC<br>50, 60 Hz<br>V±10% | Energy<br>efficiency | Ambient<br>temperature<br>t <sub>a</sub> (°C) | Casing<br>temperature<br>t <sub>c</sub> (°C) | Casing | Output<br>W | Luminous<br>factor<br>% |
| <b>For T5 lamps</b> – Casing: M8, M10 and M11 |      |      |                             |                    |               |                                  |                      |                                               |                                              |        |             |                         |
| 14                                            | T5   | G5   | 1 x 14.0                    | ELXc 135.856       | <b>188093</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 17.0        | 110.7                   |
| 2x14                                          | T5   | G5   | 2 x 14.0                    | ELXc 235.857       | <b>188094</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 33.4        | 107.0                   |
| 3x14                                          | T5   | G5   | 3 x 14.0                    | ELXc 414.868       | <b>188438</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M8     | 48.0        | 105.4                   |
| 4x14                                          | T5   | G5   | 4 x 14.0                    | ELXc 414.868       | <b>188438</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M8     | 63.0        | 102.3                   |
| 21                                            | T5   | G5   | 1 x 21.0                    | ELXc 135.856       | <b>188093</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 24.0        | 107.4                   |
| 2x21                                          | T5   | G5   | 2 x 21.0                    | ELXc 235.857       | <b>188094</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 50.2        | 110.6                   |
| 24                                            | T5   | G5   | 1 x 22.5                    | ELXc 140.862       | <b>188140</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 27.0        | 114.0                   |
| 2x24                                          | T5   | G5   | 2 x 22.5                    | ELXc 240.863       | <b>188616</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 51.0        | 107.4                   |
| 3x24                                          | T5   | G5   | 3 x 22.5                    | ELXc 424.223       | <b>183039</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 75                                      | M8     | 78.0        | 103.7                   |
| 4x24                                          | T5   | G5   | 4 x 22.5                    | ELXc 424.223       | <b>183039</b> | 220–240                          | A2                   | –15 to 55                                     | max. 75                                      | M8     | 101.7       | 103.5                   |
| 28                                            | T5   | G5   | 1 x 28.0                    | ELXc 135.856       | <b>188093</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 32.0        | 104.9                   |
| 2x28                                          | T5   | G5   | 2 x 28.0                    | ELXc 235.857       | <b>188094</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 60.6        | 106.2                   |
| 3x28                                          | T5   | G5   | 3 x 27.9                    | ELXc 328.224       | <b>183094</b> | 220–240                          | A2                   | –15 to 55                                     | max. 70                                      | M8     | 89.9        | 100.0                   |
| 35                                            | T5   | G5   | 1 x 35.0                    | ELXc 135.856       | <b>188093</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 39.5        | 102.7                   |
| 2x35                                          | T5   | G5   | 2 x 35.0                    | ELXc 235.857       | <b>188094</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 74.5        | 102.5                   |
| 39                                            | T5   | G5   | 1 x 38.0                    | ELXc 140.862       | <b>188140</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 43.0        | 107.0                   |
| 2x39                                          | T5   | G5   | 2 x 38.0                    | ELXc 240.863       | <b>188616</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 82.0        | 97.9                    |
| 49                                            | T5   | G5   | 1 x 49.0                    | ELXc 149.858       | <b>188095</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 54.0        | 102.5                   |
| 2x49                                          | T5   | G5   | 2 x 49.0                    | ELXc 249.859       | <b>188617</b> | 220–240                          | A2 BAT               | –15 to 50                                     | max. 70                                      | M10    | 113.0       | 106.6                   |
| 54                                            | T5   | G5   | 1 x 54.0                    | ELXc 154.864       | <b>188142</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 65                                      | M10    | 59.0        | 101.1                   |
| 2x54                                          | T5   | G5   | 2 x 54.0                    | ELXc 254.865       | <b>188618</b> | 220–240                          | A2 BAT               | –15 to 50                                     | max. 70                                      | M10    | 119.0       | 106.0                   |
| 80                                            | T5   | G5   | 1 x 80.0                    | ELXc 180.866       | <b>188144</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M10    | 87.0        | 97.6                    |
| 2x80                                          | T5   | G5   | 2 x 80.0                    | ELXc 280.538       | <b>188619</b> | 220–240                          | A2 BAT               | –15 to 50                                     | max. 70                                      | M11    | 175.0       | 97.2                    |
| <b>For T8 lamps</b> – Casing: M8              |      |      |                             |                    |               |                                  |                      |                                               |                                              |        |             |                         |
| 3x18                                          | T8   | G13  | 3 x 16.0                    | ELXc 418.204       | <b>188744</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M8     | 56.0        | 100.8                   |
| 4x18                                          | T8   | G13  | 4 x 16.0                    | ELXc 418.204       | <b>188744</b> | 220–240                          | A2 BAT               | –15 to 55                                     | max. 70                                      | M8     | 71.5        | 98.9                    |
| 3x36                                          | T8   | G13  | 3 x 32.0                    | ELXc 336.214       | <b>188595</b> | 220–240                          | A2 BAT               | –15 to 50                                     | max. 65                                      | M8     | 105.0       | 99.4                    |

Circuit diagrams see pages 255–259

new