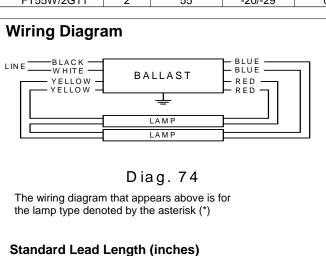


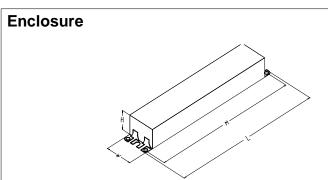
| ICN2S54N@120V   |                  |  |  |  |  |
|-----------------|------------------|--|--|--|--|
| Brand Name      | CENTIUM T5       |  |  |  |  |
| Ballast Type    | Electronic       |  |  |  |  |
| Starting Method | Programmed Start |  |  |  |  |
| Lamp Connection | Series           |  |  |  |  |
| Input Voltage   | 120-277          |  |  |  |  |
| Input Frequency | 50/60 HZ         |  |  |  |  |
| Status          | Active           |  |  |  |  |

| Lamp Type            | Num.<br>of<br>Lamps | Rated<br>Lamp Watts | Min. Start<br>Temp (F/C) | Input Current<br>(Amps) | Input Power<br>(ANSI<br>Watts) | Ballast<br>Factor | MAX<br>THD<br>% | Power<br>Factor | MAX Lamp<br>Current Crest<br>Factor | B.E.F. |
|----------------------|---------------------|---------------------|--------------------------|-------------------------|--------------------------------|-------------------|-----------------|-----------------|-------------------------------------|--------|
| F54T5/HO             | 1                   | 54                  | -20/-29                  | 0.52                    | 62                             | 1.02              | 15              | 0.98            | 1.7                                 | 1.65   |
| * F54T5/HO           | 2                   | 54                  | -20/-29                  | 1.00                    | 120                            | 1.00              | 10              | 0.98            | 1.7                                 | 0.83   |
| F54T5/HO/ES<br>(49W) | 1                   | 49                  | -20/-29                  | 0.50                    | 60                             | 1.10              | 15              | 0.98            | 1.7                                 | 1.83   |
| F54T5/HO/ES<br>(49W) | 2                   | 49                  | -20/-29                  | 0.93                    | 110                            | 1.04              | 10              | 0.98            | 1.7                                 | 0.95   |
| FT36W/2G11           | 1                   | 36                  | -20/-29                  | 0.39                    | 46                             | 1.11              | 20              | 0.98            | 1.7                                 | 2.41   |
| FT36W/2G11           | 2                   | 36                  | -20/-29                  | 0.75                    | 90                             | 1.11              | 10              | 0.98            | 1.7                                 | 1.23   |
| FT50W/2G11           | 1                   | 50                  | -20/-29                  | 0.51                    | 61                             | 1.14              | 15              | 0.98            | 1.7                                 | 1.87   |
| FT50W/2G11           | 2                   | 50                  | -20/-29                  | 0.99                    | 118                            | 1.07              | 10              | 0.98            | 1.7                                 | 0.91   |
| FT55W/2G11           | 1                   | 55                  | -20/-29                  | 0.49                    | 58                             | 0.98              | 15              | 0.98            | 1.7                                 | 1.69   |
| FT55W/2G11           | 2                   | 55                  | -20/-29                  | 0.94                    | 112                            | 0.93              | 10              | 0.98            | 1.7                                 | 0.83   |



|        | in. | cm.   |
|--------|-----|-------|
| Black  | 25  | 63.5  |
| White  | 25  | 63.5  |
| Blue   | 27  | 68.6  |
| Red    | 27  | 68.6  |
| Yellow | 42  | 106.7 |
| Gray   |     | 0     |
| Violet |     | 0     |
| Violet |     | 0     |

| in. | cm. |
|-----|-----|
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | in. |



## **Enclosure Dimensions**

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 9.5 "       | 1.3 "     | 1.0 "      | 8.9 "        |
| 9 1/2       | 1 3/10    | 1          | 8 9/10       |
| 24.1 cm     | 3.3 cm    | 2.5 cm     | 22.6 cm      |



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# **Electrical Specifications**

| 10112001        | 1101201          |
|-----------------|------------------|
| Brand Name      | CENTIUM T5       |
| Ballast Type    | Electronic       |
| Starting Method | Programmed Start |
| Lamp Connection | Series           |
| Input Voltage   | 120-277          |
| Input Frequency | 50/60 HZ         |
| Status          | Active           |

ICN2S54N@120V

#### Notes:

## Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads or poke-in wire trap connectors color-coded per ANSI C82.11.

#### Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.3 Ballast shall operate from 50/60 Hz input source of \_\_\_\_\_\_ (120V through 277V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.4 Ballast shall be high frequency electronic type and operate lamps at a frequency above 42 kHz to avoid interference with infrared devices and eliminate visible flicker.
- 2.5 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.6 Ballast shall have a minimum ballast factor of 1.0 for primary lamp application.
- 2.7 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.8 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line voltage with primary lamp.
- 2.9 Ballast shall have a Class A sound rating.
- 2.10 Ballast shall have a minimum starting temperature of \_\_\_\_\_ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.11 Ballast shall provide Lamp EOL Protection Circuit.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Four-lamp ballast shall have (semi-independent or independent) lamp operation.

# Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

### Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C. Ballasts with a "90C" designation in their catalog number shall also carry a three-year warranty at a maximum case temperature of 90C.
- 4.3 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market.



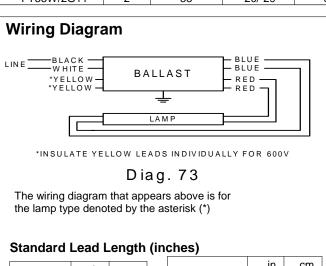


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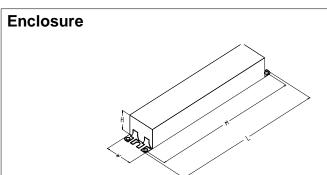
| ICN2S54N@277V   |                  |  |  |  |
|-----------------|------------------|--|--|--|
| Brand Name      | CENTIUM T5       |  |  |  |
| Ballast Type    | Electronic       |  |  |  |
| Starting Method | Programmed Start |  |  |  |
| Lamp Connection | Series           |  |  |  |
| Input Voltage   | 120-277          |  |  |  |
| Input Frequency | 50/60 HZ         |  |  |  |
| Status          | Active           |  |  |  |

| Lamp Type              | Num.<br>of<br>Lamps | Rated<br>Lamp Watts | Min. Start<br>Temp (F/C) | Input Current<br>(Amps) | Input Power<br>(ANSI<br>Watts) | Ballast<br>Factor | MAX<br>THD<br>% | Power<br>Factor | MAX Lamp<br>Current Crest<br>Factor | B.E.F. |
|------------------------|---------------------|---------------------|--------------------------|-------------------------|--------------------------------|-------------------|-----------------|-----------------|-------------------------------------|--------|
| F54T5/HO               | 1                   | 54                  | -20/-29                  | 0.23                    | 62                             | 1.00              | 15              | 0.98            | 1.7                                 | 1.61   |
| F54T5/HO               | 2                   | 54                  | -20/-29                  | 0.43                    | 116                            | 1.00              | 10              | 0.98            | 1.7                                 | 0.86   |
| * F54T5/HO/ES<br>(49W) | 1                   | 49                  | -20/-29                  | 0.22                    | 60                             | 1.10              | 15              | 0.98            | 1.7                                 | 1.83   |
| F54T5/HO/ES<br>(49W)   | 2                   | 49                  | -20/-29                  | 0.40                    | 110                            | 1.04              | 10              | 0.98            | 1.7                                 | 0.95   |
| FT36W/2G11             | 1                   | 36                  | -20/-29                  | 0.18                    | 46                             | 1.11              | 20              | 0.98            | 1.7                                 | 2.41   |
| FT36W/2G11             | 2                   | 36                  | -20/-29                  | 0.32                    | 87                             | 1.11              | 10              | 0.98            | 1.7                                 | 1.28   |
| FT50W/2G11             | 1                   | 50                  | -20/-29                  | 0.23                    | 61                             | 1.14              | 15              | 0.98            | 1.7                                 | 1.87   |
| FT50W/2G11             | 2                   | 50                  | -20/-29                  | 0.43                    | 115                            | 1.07              | 10              | 0.98            | 1.7                                 | 0.93   |
| FT55W/2G11             | 1                   | 55                  | -20/-29                  | 0.22                    | 58                             | 0.98              | 15              | 0.98            | 1.7                                 | 1.69   |
| FT55W/2G11             | 2                   | 55                  | -20/-29                  | 0.41                    | 109                            | 0.93              | 10              | 0.98            | 1.7                                 | 0.85   |



| Otanaara | LCuu L | ciigaii |
|----------|--------|---------|
|          | in.    | cm.     |
| Black    | 24     | 61      |
| White    | 24     | 61      |
| Blue     | 27     | 68.6    |
| Red      | 27     | 68.6    |
| Yellow   | 47     | 119.4   |
| Gray     |        | 0       |
| Violet   |        | 0       |

| in. | cm. |
|-----|-----|
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | 0   |
|     | in. |



## **Enclosure Dimensions**

| OverAll (L) | Width (W) | Height (H) | Mounting (M) |
|-------------|-----------|------------|--------------|
| 9.5 "       | 1.3 "     | 1.0 "      | 8.9 "        |
| 9 1/2       | 1 3/10    | 1          | 8 9/10       |
| 24.1 cm     | 3.3 cm    | 2.5 cm     | 22.6 cm      |





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# **Electrical Specifications**

| ICN2S54N@277V   |                  |  |  |  |
|-----------------|------------------|--|--|--|
| Brand Name      | CENTIUM T5       |  |  |  |
| Ballast Type    | Electronic       |  |  |  |
| Starting Method | Programmed Start |  |  |  |
| Lamp Connection | Series           |  |  |  |
| Input Voltage   | 120-277          |  |  |  |
| Input Frequency | 50/60 HZ         |  |  |  |
| Status          | Active           |  |  |  |

#### Notes:

## Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads or poke-in wire trap connectors color-coded per ANSI C82.11.

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- 2.10 Ballast shall have a minimum starting temperature of \_\_\_\_\_ {-18C (0F) or -29C (-20F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
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- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
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