

This Is An Original Product From Fulham Co., Inc

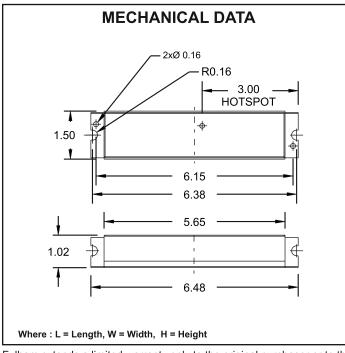
Description: WorkHorse Series Versatile, Solid State Electronic Ballast. Small Case Size, High Power Factor, High Frequency, Light Weight, Also Available In 120/230/277V 50/60 Hz.

This Ballast Will Operate Following Lamps.

**REFER TO LAMP WATTS/TYPE** 

## **ELECTRICAL DATA**

| INPUT VOLT: 120V ± 10% | , 50/60Hz |                  | -        |              |              |        | -       |         |  |
|------------------------|-----------|------------------|----------|--------------|--------------|--------|---------|---------|--|
| LAMP WATTS/TYPE        | T5CR40W   | CR32W            | T5CR22W  | 22+32 CR     | F24T5        | F54T5  | * F15T8 | * F15T8 |  |
| LAMPS OPERATED         |           |                  | •        | 1            |              |        | 2       | 3       |  |
| INPUT WATTS            | 36        | 28               | 26       | 36           | 25           | 56     | 28      | 40      |  |
| LINE CURRENT:          | 0.33      | 0.25             | 0.23     | 0.32         | 0.23         | 0.50   | 0.25    | 0.35    |  |
| POWER FACTOR           | 0.93      | 0.93             | 0.94     | 0.93         | 0.92         | 0.94   | 0.92    | 0.93    |  |
| BALLAST FACTOR         | 0.87      | 0.79             | 1.03     | 0.68         | 1.02         | 0.99   | 1.13    | 0.90    |  |
| EFFICACY FACTOR        | 2.38      | 2.83             | 4.02     | 1.91         | 4.06         | 1.77   | 4.06    | 2.27    |  |
| THD                    | 38%       | 39%              | 36%      | 37%          | 41%          | 34%    | 39%     | 36%     |  |
| EMI/RFI COMPLIANCE     |           |                  | FCC I    | PART 18-A (  | (Non-Cons    | umer)  |         |         |  |
| SOUND RATING           |           |                  |          | " <i>P</i>   | ۱, "         |        |         |         |  |
| BALLAST TYPE           |           |                  |          | INSTAN       | Γ START      |        |         |         |  |
| VOLTAGE TRANSIENTS     |           |                  |          | ANSI         | 62.41        |        |         |         |  |
| INPUT/PROTECTION       |           | FUSE             |          |              |              |        |         |         |  |
| MIN. OPERATING TEMP    |           | -30 °C (-20 °F ) |          |              |              |        |         |         |  |
| MAX. CASE TEMP         |           | 70 °C ( 158 °F ) |          |              |              |        |         |         |  |
| APPROVALS/CLASS        |           |                  | UL LISTE | D, CLASS " F | P", 1 OR 2 C | UTDOOR |         |         |  |



| WIRING DIAGRAMS                                   |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| WIRE BLACK WHITE RED BLUE YELLOW BROW             |  |  |  |  |  |  |  |  |
| LENGTH-INCHES 18 ± 1" 18 ± 1" 36 ± 1" - 36 ± 1" - |  |  |  |  |  |  |  |  |

FOR WIRING DIAGRAM,
PLEASE REFER TO FULHAM'S CATALOG

NOTE : This Ballast Must Be Grounded

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2006-20SP-1 rev Y



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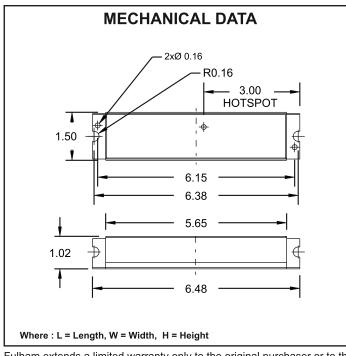
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**REFER TO LAMP WATTS/TYPE** 

### **ELECTRICAL DATA**

| INPUT VOLT: 120V ± 10% | , 50/60Hz |   |       | <u>-</u>    |            |           |         |       |  |
|------------------------|-----------|---|-------|-------------|------------|-----------|---------|-------|--|
| LAMP WATTS/TYPE        | FT24W     | FT36W   | FT40W | T5CR55W     | * F32T8    | * F60T8HO | *CFT18W | F15T8 |  |
| LAMPS OPERATED         |           | ,   | 1     |             | 1          | 1         | 2       | 1     |  |
| INPUT WATTS            | 24        | 31  | 41    | 53          | 38         | 61        | 27      | 18    |  |
| LINE CURRENT:          | 0.22      | 0.28  | 0.37  | 0.47        | 0.34       | 0.54      | 0.25    | 0.16  |  |
| POWER FACTOR           | 0.91      | 0.92  | 0.93  | 0.93        | 0.93       | 0.94      | 0.92    | 0.91  |  |
| BALLAST FACTOR         | 1.00      | 0.81  | 0.89  | 1.33        | 1.40       | 1.14      | 0.72    | 1.18  |  |
| EFFICACY FACTOR        | 4.12      | 2.65  | 2.16  | 2.50        | 3.69       | 1.87      | 2.67    | 6.56  |  |
| THD                    | 41%       | 40%   | 37%   | 36%         | 36%        | 34%       | 40%     | 42%   |  |
| EMI/RFI COMPLIANCE     |           |   | FCC   | PART 18-A ( | (Non-Consi | umer)     |         |       |  |
| SOUND RATING           |           |   |       | " <i>P</i>  | ١          |           |         |       |  |
| BALLAST TYPE           |           |   |       | INSTAN      | ΓSTART     |           |         |       |  |
| VOLTAGE TRANSIENTS     |           |   |       | ANSI        | 62.41      |           |         |       |  |
| INPUT/PROTECTION       |           |   |       | FU          | SE         |           |         |       |  |
| MIN. OPERATING TEMP    |           | -30 °C (-20 °F)                               |       |             |            |           |         |       |  |
| MAX. CASE TEMP         |           | 70 °C (158 °F)                                |       |             |            |           |         |       |  |
| APPROVALS/CLASS        |           | UL LISTED, CLASS " P ", 1 OR 2 OUTDOOR        |       |             |            |           |         |       |  |
| APPROVALS/CLASS        |           | * UL /cUL LISTED, CLASS " P ", 1 OR 2 OUTDOOR |       |             |            |           |         |       |  |



| WIRING DIAGRAMS                                     |       |       |     |      |        |       |  |  |
|---|-------|-------|-----|------|--------|-------|--|--|
| WIRE  | BLACK | WHITE | RED | BLUE | YELLOW | BROWN |  |  |
| LENGTH - INCHES 18 ± 1" 18 ± 1" 36 ± 1" - 36 ± 1" - |       |       |     |      |        |       |  |  |

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2006-20SP-2 rev Y



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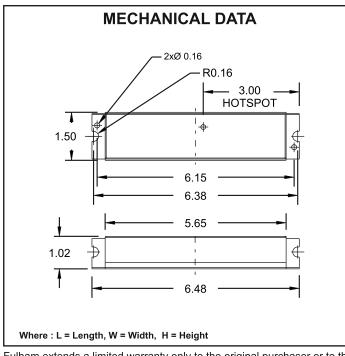
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This Ballast Will Operate Following Lamps.

**REFER TO LAMP WATTS/TYPE** 

### **ELECTRICAL DATA**

| INPUT VOLT: 120V ± 10%, 5 | 0/60Hz                                 | -                | -           | -           | -               |         |       |           |  |
|---------------------------|--|------------------|-------------|-------------|-----------------|---------|-------|-----------|--|
| LAMP WATTS/TYPE           | * F17T8                                | * F17T8          | * F32T8     | * F32T8     | * CR40WT9       | F24T5HO | F42T6 | * F72T8HO |  |
| LAMPS OPERATED            | 2                                      | 1                | 1           | 2           | 1               | 2       | 2     | 1         |  |
| INPUT WATTS               | 33                                     | 21               | 38          | 61          | 36              | 40      | 61    | 73        |  |
| LINE CURRENT:             | 0.30                                   | 0.19             | 0.34        | 0.54        | 0.32            | 0.36    | 0.54  | 0.65      |  |
| POWER FACTOR              | 0.93                                   | 0.92             | 0.93        | 0.94        | 0.93            | 0.94    | 0.94  | 0.94      |  |
| BALLAST FACTOR            | 1.13                                   | 1.48             | 1.40        | 1.06        | 0.81            | 0.73    | 0.97  | 1.05      |  |
| EFFICACY FACTOR           | 3.43                                   | 7.05             | 3.69        | 1.74        | 2.25            | 1.82    | 1.59  | 1.43      |  |
| THD                       | 37%                                    | 40%              | 36%         | 33%         | 37%             | 36%     | 33%   | 32%       |  |
| EMI/RFI COMPLIANCE        |  |                  | FCC         | PART 18-A   | (Non-Consu      | mer)    |       |           |  |
| SOUND RATING              |  |                  |             | ıı          | Α"              |         |       |           |  |
| BALLAST TYPE              |  |                  |             | INSTAN      | IT START        |         |       |           |  |
| VOLTAGE TRANSIENTS        |  |                  |             | ANS         | l 62.41         |         |       |           |  |
| INPUT/PROTECTION          |  |                  |             | FU          | JSE             |         |       |           |  |
| MIN. OPERATING TEMP       |  | -30 °C (-20 °F ) |             |             |                 |         |       |           |  |
| MAX. CASE TEMP            | 70 °C ( 158 °F )                       |                  |             |             |                 |         |       |           |  |
| APPROVALS/CLASS           | UL LISTED, CLASS " P ", 1 OR 2 OUTDOOR |                  |             |             |                 |         |       |           |  |
| APPROVALS/CLASS           |  |                  | * UL /cUL L | ISTED, CLAS | S " P ", 1 OR 2 | OUTDOOR |       |           |  |



| WIRING DIAGRAMS                                     |       |       |     |      |        |       |  |  |
|---|-------|-------|-----|------|--------|-------|--|--|
| WIRE  | BLACK | WHITE | RED | BLUE | YELLOW | BROWN |  |  |
| LENGTH - INCHES 18 ± 1" 18 ± 1" 36 ± 1" - 36 ± 1" - |       |       |     |      |        |       |  |  |

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2006-20SP-3 rev Y



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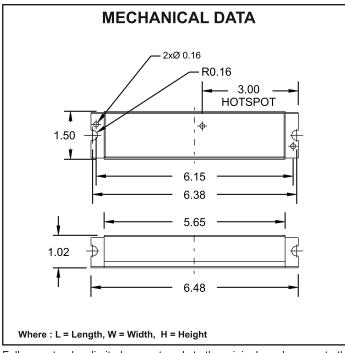
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This Ballast Will Operate Following Lamps.

**REFER TO LAMP WATTS/TYPE** 

### **ELECTRICAL DATA**

| INPUT VOLT: 120V ± 10%, 5 | 0/60Hz                                 |   |         |             |                      |       |         |        |  |
|---------------------------|--|---|---------|-------------|----------------------|-------|---------|--------|--|
| LAMP WATTS/TYPE           | F39T5HO                                | * F20T12                                      | F24T5HO | CFTR32W     | 2D38                 | F25T8 | CFTR26W | CFQ26W |  |
| LAMPS OPERATED            | 1                                      | 2   | 2       | 1           | 1                    | 1     | 1       | 1      |  |
| INPUT WATTS               | 38                                     | 30  | 40      | 34          | 29                   | 30    | 27      | 29     |  |
| LINE CURRENT:             | 0.34                                   | 0.27  | 0.35    | 0.30        | 0.26                 | 0.27  | 0.24    | 0.27   |  |
| POWER FACTOR              | 0.93                                   | 0.93  | 0.93    | 0.93        | 0.93                 | 0.93  | 0.92    | 0.92   |  |
| BALLAST FACTOR            | 0.88                                   | 0.94  | 0.79    | 0.96        | 0.86                 | 1.44  | 1.02    | 1.01   |  |
| EFFICACY FACTOR           | 2.31                                   | 3.13  | 1.98    | 2.85        | 2.96                 | 4.88  | 3.79    | 3.47   |  |
| THD                       | 37%                                    | 38%   | 37%     | 38%         | 41%                  | 39%   | 41%     | 42%    |  |
| EMI/RFI COMPLIANCE        |  |   | FCC     | PART 18-A ( | (Non-Consι           | ımer) |         |        |  |
| SOUND RATING              |  |   |         | " <i>F</i>  | ۱,"                  |       |         |        |  |
| BALLAST TYPE              |  |   |         | INSTAN      | Γ START              |       |         |        |  |
| VOLTAGE TRANSIENTS        |  |   |         | ANSI        | 62.41                |       |         |        |  |
| INPUT/PROTECTION          |  |   |         | FU          | SE                   |       |         |        |  |
| MIN. OPERATING TEMP       |  |   |         | -30 °C (    | -20 <sup>0</sup> F ) |       |         |        |  |
| MAX. CASE TEMP            | 70 °C (158 °F)                         |   |         |             |                      |       |         |        |  |
| APPROVALS/CLASS           | UL LISTED, CLASS " P ", 1 OR 2 OUTDOOR |   |         |             |                      |       |         |        |  |
| APPROVALS/CLASS           |  | * UL /cUL LISTED, CLASS " P ", 1 OR 2 OUTDOOR |         |             |                      |       |         |        |  |



| WIRING DIAGRAMS                                     |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| WIRE BLACK WHITE RED BLUE YELLOW BRO                |  |  |  |  |  |  |  |  |
| LENGTH - INCHES 18 ± 1" 18 ± 1" 36 ± 1" - 36 ± 1" - |  |  |  |  |  |  |  |  |

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2006-20SP-4 rev Y



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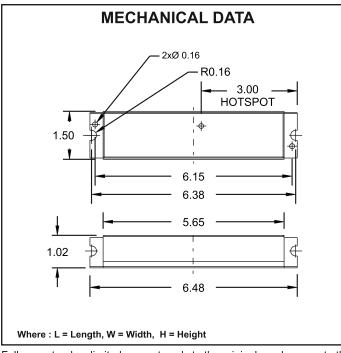
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This Ballast Will Operate Following Lamps.

**REFER TO LAMP WATTS/TYPE** 

### **ELECTRICAL DATA**

| INPUT VOLT: 120V ± 10%, 50/60 | <br> Hz | <del></del>                           | <u>.                                      </u> |           |  | - |  |
|-------------------------------|---------|---------------------------------------|--|-----------|--|---|--|
| LAMP WATTS/TYPE               | T9CR22W |                                       |  |           |  |   |  |
| LAMPS OPERATED                | 1       |                                       |  |           |  |   |  |
| INPUT WATTS                   | 19      |                                       |  |           |  |   |  |
| LINE CURRENT:                 | 0.17    |                                       |  |           |  |   |  |
| POWER FACTOR                  | 0.93    |                                       |  |           |  |   |  |
| BALLAST FACTOR                | 0.98    |                                       |  |           |  |   |  |
| EFFICACY FACTOR               | 5.25    |                                       |  |           |  |   |  |
| THD                           | 39%     |                                       |  |           |  |   |  |
| EMI/RFI COMPLIANCE            |         | FCC PART                              | Γ18-A (Non-Cons                                | sumer)    |  |   |  |
| SOUND RATING                  |         |                                       | "A"  |           |  |   |  |
| BALLAST TYPE                  |         | IN                                    | ISTANT START                                   |           |  |   |  |
| VOLTAGE TRANSIENTS            |         |                                       | ANSI 62.41                                     |           |  |   |  |
| INPUT/PROTECTION              |         |                                       | FUSE   |           |  |   |  |
| MIN. OPERATING TEMP           |         | -30 °C (-20 °F)                       |  |           |  |   |  |
| MAX. CASE TEMP                |         | 70 °C ( 158 °F )                      |  |           |  |   |  |
| APPROVALS/CLASS               |         | UL LISTED, CLASS " P", 1 OR 2 OUTDOOR |  |           |  |   |  |
| APPROVALS/CLASS               |         | * UL /cUL LISTED,                     | CLASS " P", 1 OR                               | 2 OUTDOOR |  |   |  |



| WIRING DIAGRAMS                                     |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| WIRE BLACK WHITE RED BLUE YELLOW BRO                |  |  |  |  |  |  |  |  |
| LENGTH - INCHES 18 ± 1" 18 ± 1" 36 ± 1" - 36 ± 1" - |  |  |  |  |  |  |  |  |

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