20-5364 C

| REVISIONS | | |
|---|---|---|
| REV | DESCRIPTION | DATE |
| C0 | CHG PER ECN 24-001, 002, 008, 010 & NECN1208-00001 | 11/01/2024 |
| B0 | CHANGED PER ECN 22-003 | 06/14/2022 |
| A0 | RELEASE TO PRODUCTION | 02/08/2022 |

## SAFETY

SAFETY STANDARDS COMPLIANCE:
UL8750
UL1310

LVD EN61347-2-13
EMI STANDARDS:
FCC 47 CFR PART 15 CLASS B
CE EN55015, EN61547
EN61000-4-2,3,4,5,6,8,11

SAFETY CERTIFICATIONS
UL, cUL E357847
LVD 23AS100743S347A002
EMC E04A23100743E00101
FCC 24AE040887F001

## INPUT

INPUT RANGE:
100~277 VAC, 0.5~0.18A
@ FULL LOAD.

THD<20%

FREQUENCY: 50/60 Hz.

POWER FACTOR: >0.9@120Vac

EFFICIENCY: 85 % Typ @ full load

LEAKAGE CURRENT:
< 0.01mA @277VAC

PEAK INRUSH (NEMA 410):
$I^2t$=0.00053 $A^2$ sec @110Vac
$I^2t$=0.007526 $A^2$ sec @277Vac

Surge Immunity: 2.5K Vac

## OUTPUT

Absolute maximum rating: 25W

| OUT | TYPE | OUTPUT | MIN | MAX | LOAD REG | MAX. RIP |
|---|---|---|---|---|---|---|
| #1 | CC | 700mA | 30V | 36V | ±5% | 10% |

Note for CC output:
Actual output current depends on the selector switch

## MISCELLANEOUS

COOLING: CONVECTION

PROTECTION:
SCP,OLP,OVP
AUTO-RECOVERY

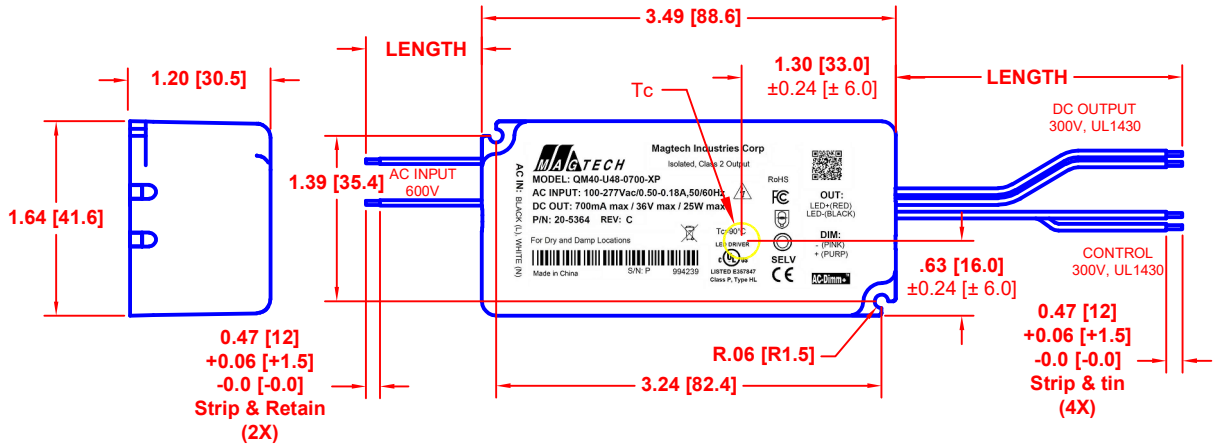
NOISE LEVEL: N/A

RELIABILITY (MTBF):
100,000 HRS. @ 25 DEG. C @ FULL LOAD

ENVIRONMENTAL CONDITIONS:
LOWEST OPERATING TEMPERATURE: -40°C: Tc=90°C
RELATIVE HUMIDITY: 5 ~ 95%
LOCATION: For Dry and Damp Use Only

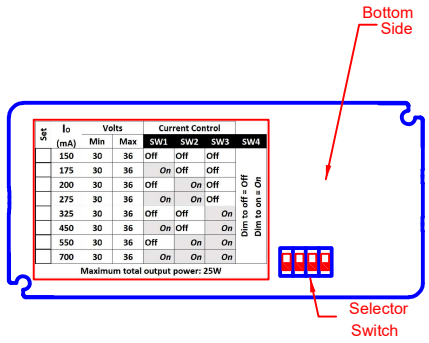
CONNECTOR:
N/A

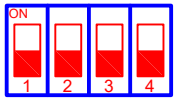
PF, THD AND EFFICIENCY CALCULATIONS ARE BASED ON THE LOADING OF THE DRIVER TO MINIMUM 65% AND MAXIMUM 100% OF 25W



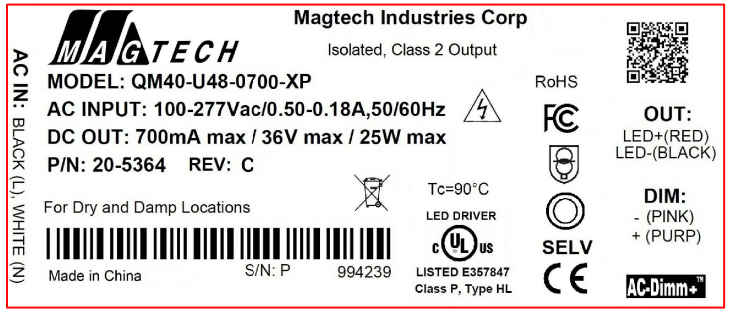

| Set | Io (mA) | Volts Min | Volts Max | Current Control SW1 | SW2 | SW3 | SW4 |
|---|---|---|---|---|---|---|---|
| | 150 | 30 | 36 | Off | Off | Off | Dim to off = Off<br>Dim to on = On |
| | 175 | 30 | 36 | On | Off | Off | |
| | 200 | 30 | 36 | Off | On | Off | |
| | 275 | 30 | 36 | On | On | Off | |
| | 325 | 30 | 36 | Off | Off | On | |
| | 450 | 30 | 36 | On | Off | On | |
| | 550 | 30 | 36 | Off | On | On | |
| | 700 | 30 | 36 | On | On | On | |

Maximum total output power: 25W




Selector Switch (OFF as default)




| CON | PIN | COLOR | OUTPUT | AWG | LENGTH |
|---|---|---|---|---|---|
| AC IN | --- | BLACK | LINE | 18 | 6.5 [165]<br>±0.5 [±13] |
| | --- | WHITE | NEUTRAL | 18 | |
| DC OUT | --- | RED | +V | 18 | |
| | --- | BLACK | GND | 18 | |
| DIM CNTL | --- | PURPLE | DIM+ | 22 | |
| | --- | PINK | DIM- | 22 | |

Notes:
1.- 5 yrs warr provided Tc point remains below 80°C
2.- Low flickering – Less than 10% up to 120Hz
3.- Dimming: 0-10V Dimming, driver will dim to off.
4.- 4 in 1 dimming – TRIAC / ELV / 0-10V / PWM
5.- These LED drivers are suitable for factory wiring only.
6.- These LED drivers shall be enclosed on the end product.
7.- These LED drivers have been evaluated to Class 2 output requirement.
8.- These LED drivers meet the requirements identified as Type HL. Drivers may be used on a Class I, Division 2 hazardous (Classified) location luminaires (Per UL 8750, Supplement SB).
9.- These LED drivers meet the requirements identified as Class P (Per UL 8750, Supplement SE).
10.- These LED drivers meet the requirements identified as Phase-cut Dimming (Per UL 8750, Supplement SH).
11.- These LED drivers complies with Low-Voltage Limited-Energy LED Class 2 characteristics.
12.- Wired control circuits are isolated (Per UL 8750, Supplement SF).

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UNLESS OTHERWISE SPECIFIED
DIMENSIONS IN INCHES [MM]
TOLERANCES:
.X DECIMALS± .05 [1.3]
.XX DECIMALS± .02 [0.5]
.XXX DECIMALS± .005 [0.13]
ANGLES± 1°
FRACTIONS± 1/16
DO NOT SCALE THIS DRAWING
INTERPRET DRAWING PER ANSI Y14.5M

205364C0M1.DWG

QC:

MAGTECH

TITLE: QM40-U48-0700-XP, 100-277VAC, 700mA, 36V, 25W MAX

| APPROVAL DATE: 02/15/2022 | MODEL NO. | DWG NO. | REV. | SH OF |
|---|---|---|---|---|
| EFFECTIVE DATE: 02/03/2022 | QM40-U48-0700-XP | M20-5364 | C0 | 1 1 |

FORM PF-0004