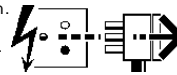


Linear and Compact lamps
T5
T8
TC-DD
TC-F
TC-L

Disconnect from mains supply before replacing the fuse or the lamp.
Vor dem Einsetzen der Sicherung oder der Lampe Spannungsfreiheit herstellen.
Débrancher le secteur avant de remplacer le fusible ou l'ampoule.
Desconectar del suministro de la red, antes de realizar la sustitución del fusible o de la lámpara.
Voor het vervangen van lamp of zekering, eerst netspanning uitschakelen.
Koppla bort spänningen före byte av en säkring eller en lampa.

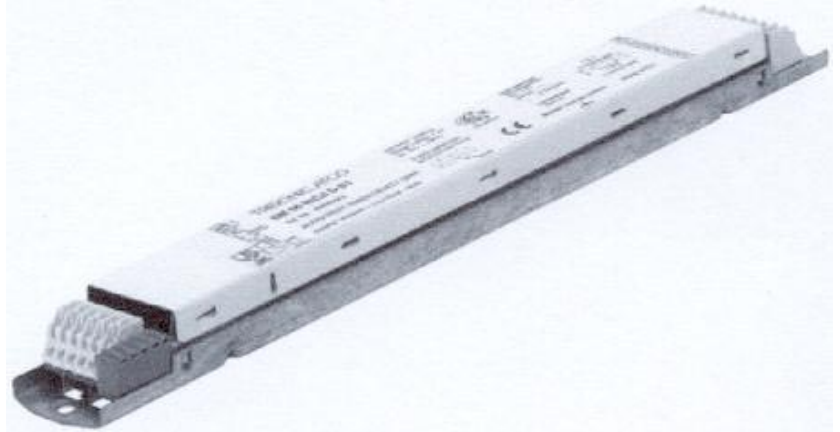
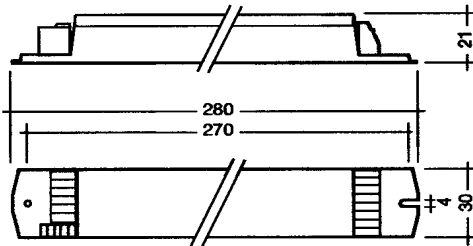


Switch Off
Abschalten
Débrancher
Desconectar
Uitschakelen
Stäng av

Emergency lighting modules with self test facility
T5, T8, TC-DD, TC-F, TC-L linear and compact lamps



EM SELFTEST 220–240 V 50/60 Hz



Description:

Low profile emergency lighting modules with self testing facility to cover 1 hour and 3 hour duration operating from NiCd and NiMH batteries. All modules incorporate five pole technology for use with HF ballasts and have preheat starting and permanent cathode heating during the emergency operation. Boost starting for 55 seconds at higher power levels is provided for all lamps to ensure rapid warm up, optimised lamp life and improved initial visibility during an emergency operation. Power control technology ensures maximum emergency ballast lumen factors for all lamps on a given module.

Self testing is conducted on a weekly functional and annual duration basis with adaptive duration testing feature to minimise risk. An easy commissioning feature ensures synchronisation of tests and automatic initiation of commissioning tests.

Features:

- Self testing in accordance with pr IEC 62034
- Low profile cross section (21 mm x 30 mm)
- 5 pole technology
- For use with HF ballasts

- NiCd or NiMH battery options
- 10–15 hour accu recharge time
- 3 hour and 1 hour operation
- High and standard BLF for 1 hour versions
- Bi-colour LED to indicate status
- AC operation of lamps
- Pre-heating of cathodes during emergency operation
- Permanent cathode heating during emergency operation
- Boost starting facility for all lamps
- Rest mode facility
- Adaptive mode for testing with minimum risk
- Easy commissioning feature
- Deep discharge protection
- Electronic multilevel charging system
- Self testing
 - Battery condition
 - Lamp condition
 - Charge condition
 - Weekly functional test
 - Annual duration test

EM SELFTEST 3 h duration – NiCd 4.0 Ah D cells or NiMH 4.0 Ah Cs cells

type	article number	number of cells
EM 34 ST	89899680	4
EM 35 ST	89899681	5
EM 36 ST	89899682	6

EM SELFTEST 1 h duration standard BLF – NiCd 1.5 Ah or NiMH 2.0 Ah Cs cells

type	article number	number of cells
EM 14 ST	89899683	4
EM 15 ST	89899684	5
EM 16 ST	89899685	6

EM HO SELFTEST 1 h duration "high output" – NiCd 4.0 Ah D cells or NiMH 4.0 Ah Cs cells

type	article number	number of cells
EM 14 HO ST	89899686	4
EM 15 HO ST	89899687	5
EM 16 HO ST	89899688	6

NiCd 1.5 Ah Cs cells	type	number of cells	article number
Accu-NiCd C 4A	stick	4	89899692
Accu-NiCd C 4B *	side by side	4	89899693
Accu-NiCd C 4C *	stick + stick	2 + 2	89899694
Accu-NiCd C 5A	stick	5	89899695
Accu-NiCd C 5B *	side by side	5	89899696
Accu-NiCd C 5C *	stick + stick	3 + 2	89899697
Accu-NiCd C 6A	stick	6	89899698
Accu-NiCd C 6C	stick + stick	3 + 3	89899699

NiMH 2.0 Ah Cs cells	type	number of cells	article number
Accu-NiMH C 4A	stick	4	89899700
Accu-NiMH C 4B *	side by side	4	89899701
Accu-NiMH C 4C *	stick + stick	2 + 2	89899702
Accu-NiMH C 5A	stick	5	89899703
Accu-NiMH C 5B *	side by side	5	89899704
Accu-NiMH C 5C *	stick + stick	3 + 2	89899705
Accu-NiMH C 6A	stick	6	89899706
Accu-NiMH C 6C	stick + stick	3 + 3	89899707

NiCd 4.0 Ah D cells	type	number of cells	article number
Accu-NiCd 4A	stick	4	89895961
Accu-NiCd 4B	side by side	4	89895977
Accu-NiCd 4C	stick + stick	2 + 2	89895978
Accu-NiCd 5A	stick	5	89895973
Accu-NiCd 5B	stick + stick	3 + 2	89895962
Accu-NiCd 6A	stick + stick	3 + 3	89895963

NiMH 4.0 Ah Cs cells	type	number of cells	article number
Accu-NiMH C 4A	stick	4	89899850
Accu-NiMH C 5A	stick	5	89899851
Accu-NiMH C 6A	stick	6	89899852
Accu-NiMH C 6C	stick + stick	3 + 3	89899853

Batteries

- NiCd or NiMH options
- D or Cs cells
- High temperature cells
- Spade terminals for easy connection

Certified

- EN 55015: 2006 + A1: 2007
- EN 601347-2-7
- EN 60925
- pr IEC 62034
- Allows compliance with EN 60598-2-22
- EN 61000-3-2
- EN 61547
- IEC 60068-2-6
- IEC 60068-2-29
- IEC 60068-2-30

type	article number
LED bi-colour	89899720
LED bi-colour high brightness	89899753

type	article number
Test switch EM 2	89805277

* on request

Emergency lighting modules with self test facility
T5, T8, TC-DD, TC-F, TC-L linear and compact lamps

Technical data:

EM SELFTEST	3 hour	1 hour
Rated mains supply voltage	220-240 V	220-240 V
Mains frequency	50/60 Hz	50/60 Hz
Mains supply current	60 mA max	60 mA max
Mains supply power	< 10.0 W	< 10.0 W
Overvoltage protection	320 V for 1 hour	320 V for 1 hour
Max. working voltage U-OUT	460 V	460 V
Recharge period	15 hours	10 hours
Discharge current	1.1 A	1.1 A
Charge current: Initial	330 mA	130 mA
Fast	330 mA	210 mA
Trickle	130 mA	50 mA
Earth leakage current	< 0.5 mA	< 0.5 mA
Ambient temperature range	-5 °C to +60 °C	-5 °C to +60 °C
Maximum case temperature tc	70 °C	70 °C
Mains change over voltage	In accordance with EN 60598-2-22	In accordance with EN 60598-2-22
Min. lamp starting temperature (emergency mode)	-5 °C	-5 °C
Ingress protection	IP20	IP20
Safety class	class I	class I
Function test	weekly 30 seconds test	weekly 30 seconds test
Duration test	annual 3 hr duration test	annual 1 hr duration test
Timer	crystal controlled	crystal controlled
Boost starting time	55 seconds	55 seconds
Rest mode: Max units	100	100
Max cable length	1000 m	1000 m

Testing:

Commissioning test

A full commissioning test is carried out automatically after permanent connection of the supply. The easy commissioning feature will set the initial test day and time to ensure random testing of units.

Functional test

Functional tests are carried out for 30 seconds on a weekly basis under the control of the Micro controller. Initiation and timing of these tests is set during the commissioning of the luminaire.

Duration test

A full duration test is carried out yearly to check the capacity of the batteries.

For a full description of commissioning and test features please refer to application notes.

Test switch

An optional test switch can be wired to the EM ... SELFTEST. This can be used to:

- initiate a 30 seconds function test < 1 second press
- adjust local timing > 10 second press

For a full description of the test switch function refer to application notes.

Status indication

System status is indicated by a bi-colour LED.

LED	Status
Permanent green	System OK
Fast flashing green	Function test underway
Slow flashing green	Duration test underway
Permanent red	Lamp fault
Fast flashing red	Charging fault
Slow flashing red	Battery fault
Double pulsing green	Rest mode

Accu-NiCd

case temperature range 0 °C to +55 °C
to ensure 4 years design life
storage life in temperate conditions 4 years
battery voltage 1.2 V
capacity D 4.0 Ah
capacity Cs 1.5 Ah

Accu-NiMH 4.0 Ah

case temperature range 0 °C to +50 °C
to ensure 4 years design life
storage life in temperate conditions 4 years
battery voltage 1.2 V per cell
capacity Cs 4.0 Ah

Accu-NiMH 2.0 Ah

case temperature range 0 °C to +55 °C
to ensure 4 years design life
storage life in temperate conditions 4 years
battery voltage 1.2 V per cell
capacity Cs 2.0 Ah

Mechanical details:

Channel manufactured from galvanised steel.
Cover manufactured from white pre-coated steel.

LED bi-colour status indicator

- Green / red
- Mounting hole 6.5 mm dia
- Lead length 1000 mm

Test switch

- Mounting hole 7.0 mm dia
- Lead length 550 mm

Battery leads

- Quantity: 1 red and 1 black
- Length: 1300 mm
- Wire type: 0.5 mm² solid conductor
- Insulation rating: 90 °C

Battery end termination

Push on 4.8 mm receptacle to suit battery spade fitted with insulating cover

Module end termination

8.0 mm stripped insulation

Two-piece batteries are supplied with a 200 mm lead with 4.8 mm receptacles at each end and insulating covers to connect the separate sticks together.

Batteries:

Connection method: 4.8 x 0.5 mm spade tag welded to end of cell

For stick packs this connection is accessible after the battery caps have been fitted.

To inhibit inverter operation disconnect the batteries by removing the connector from the battery spade tag.

For battery data see separate data sheet.

TRIDONIC.ATCO

Suitable for use indoors
Geeignet für Innenanwendung
Pour un usage interne
Adecuada para uso en interiores
Geschikt voor gebruik binnen
Lämplig för inomhusbruk



Replace any cracked protective shield.

Dieses symbol bedeutet, dass defekte Schutzgläser sofort ersetzt werden müssen.

Ce symbol indique que vous devez remplacer tout verre de protection fêlé.

Este simbolo indica que hay que reemplazar filtros en caso de rotura o desperfectos.

Dette symbolet indikerer at alle ødelagte (sprukne) sikkerhetglass må skiftes.

Valaisinta el saa käyttää ilman suojalasia vioittunut suojalasi on vaihdettava uuteen ennen valaisimen käyttööottoa.



< Millimetres >



This Electrical Product MUST be recycled.



11.08

Concord

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T 0870 606 2030 F 01273 512 688 email: information@concordmarlin.com



Data sheet 03/08-269-7 We reserve the right to make technical changes without prior notice.