

EC21

Dimming for the 21st. Century

Features

- Plug-in Modular Dimmer System
 - IGBT and Thyristor modules may be mixed in the same rack
 - Dual 2.5kW and Single 5kW IGBT dimmers with 650µs rise time
 - Dual 3kW and 5kW Thyristor Dimmer Modules with 200µs or 435µs filter chokes
 - Single 10kW Thyristor modules available with 200µs or 435µs filter chokes
 - Contactor modules provide switched control for a wide range of loads
 - All dual and single modules are available with optional status reporting (Standard on IGBT modules)
 - Power Through modules offer:
 - On/Off relay activation through the control system
 - Dim/Non Dim Switch on the face of each module
 - Power Through modules are dual density
 - Dual back-to-back SCRs for each circuit
 - 200µS risetime toroidal filters
 - High-density modular assembly front of module (set to DIM or ND).
 - All Single and Dual Dimmer modules are available with SP, SPN, and RCD circuit breakers
 - CE Marked
- ### Power Through Dimming / Switching Modules:
- Future Proofing your Lighting system for both incandescent and solid state or moving lights
 - Flexible loading – when the lighting plot is consistently changing due to performance needs allowing for “mixed” circuiting between dimmed or relay controlled circuit
 - When using a hybrid lighting plot of traditional fixed and moving lights or LED luminaires that need a relay controlled straight power circuit
 - Any application that utilizes both standard forward phase SCR dimming and contact relay straight power



EC21 dual reporting module



EC21 dual module with RCD option



EC21 Dimming Rack

PHILIPS
Strand Lighting

SPECIFICATION SUBMITTAL

CONSULTANT: <input type="text"/>	PROJECT NAME: <input type="text"/>	MODEL NUMBER QUANTITY: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
DATE: <input type="text"/>	PROJECT NUMBER: <input type="text"/>	APPROVED BY: <input type="text"/>

The EC21 dimmer rack was developed in response to in-depth market research from key customers and consultants. The EC21 has set an unprecedented industry first by providing the ability to install 96 2.5kW IGBT dimmers in a single rack – greatly increasing dimming density for IGBT users.

The EC21 dimming system allows users to freely mix dimmers of any type (both IGBT and conventional modules) within a single rack. All dual and single dimmer and contactor modules may be ordered with our optional dimmer status reporting electronics, providing system operators with a wide range of dimmer information.

All Dimmer status and rack configuration is

available via any Web Browser connected to the lighting network. EC21 dimmer systems feature a universal 24 or 48-module rack design that provides support for 90-260 volt operation and are CE marked.

About Power Through Modules...

Power Through C21 Dimming/Switching modules represent the next step in future proofing your new or existing dimming systems. Power Through modules offer a dual 350uS (120 VAC) or 200uS (230 VAC) SCR dimmer (Silicon Controlled Rectifier) in conjunction with a mechanical bypass relay for each dimmer. Each module has two individual recess mounted switches that allow for a manual

switch between Dimmer or Relay so that there is never a mistake about how your system is set up. As many solid state lighting instruments do not like power from a dimmed circuit the manual switches on each module ensure that you have complete control of your rigs' power with-out any question of remote activation or deactivation of your Power Through Module settings.

In Dimmer (DIM) Mode, the SCR will work exactly the same way that all C21 dimmers have worked for years. In Relay/Non-Dim (ND) Mode the circuit will completely bypass the Choke and SCR giving you clean power to your Lighting devices and power supplies that require a constant power feed.

Technical Specifications

Standards Compliance: EMC emissions to EN50081-1, EN55014; EMC immunity to EN50082-1, IEC1000-2-2; Safety: EN60950, EN60439 Part 1 (also part 12 BS5486); design & build UL1950 The modules shall be CE marked

Mechanical Data

Construction: Heavy duty formed aluminum
Weight: 3kW dual module 3.3kg
(typical module) 5kW dual module 4.1kg
10kW single module 5.4kg



Ordering Information Cat No. Description

IGBT Dimmer Modules

76674 EC21 230VAC Dual 2.5kW SP
76675 EC21 230VAC Dual 2.5kW RCD
76676 EC21 230VAC Single 5.0kW SP
76677 EC21 230VAC Single 5.0kW RCD

Power Through (Dimmer / Relay) Modules

76603PT EC21 3.0 kW Dual S-N-PCBO Power Through Module
76602PT EC21 3.0 kW Dual S-N-DP Power Through Module
76601PT EC21 3.0 kW Dual S-N-SP Power Through Module

Constant Modules (Non-Dim)

76658 Dual 3kW SP
76659 Dual 3kW SPN
76660 Dual 3kW RCD
76664 Dual 5kW SP
76666 Dual 5kW RCD
76669 Dual 5kW RCD Reporting

Fluorescent Modules (3 Wire)

76643 Single 3kW FL SP
76644 Single 3kW FL SPN

Contactor Modules (Non-Dim)

76646 Dual 3kW ND SP
76647 Dual 3kW ND SPN
76648 Dual 3kW ND RCD
76649 Dual 3kW ND SP Reporting
76650 Dual 3kW ND SPN Reporting
76651 Dual 3kW ND RCD Reporting
76652 Dual 5kW ND SP
76654 Dual 5kW ND RCD
76655 Dual 5kW ND SP Reporting
76656 Dual 5kW ND SPN Reporting
76657 Dual 5kW ND RCD Reporting

Thyristor Dimmer Modules - Standard Dimmers

76601 Dual 3kW 200µs SP
76602 Dual 3kW 200µs SPN
76603 Dual 3kW 200µs RCD
76604 Dual 3kW 435µs SP
76605 Dual 3kW 435µs SPN
76606 Dual 3kW 435µs RCD
76613 Dual 5kW 200µs SP
76614 Dual 5kW 200µs SPN
76615 Dual 5kW 200µs RCD
76616 Dual 5kW 435µs SP
76617 Dual 5kW 435µs SPN
76618 Dual 5kW 435µs RCD
76625 Single 10kW 200µs SP
76626 Single 10kW 200µs SPN
76627 Single 10kW 200µs RCD

Thyristor Dimmer Modules - Reporting Dimmers

76607 Dual 3kW 200µs SP
76608 Dual 3kW 200µs SPN
76609 Dual 3kW 200µs RCD
76610 Dual 3kW 435µs SP
76611 Dual 3kW 435µs SPN
76612 Dual 3kW 435µs RCD
76619 Dual 5kW 200µs SP
76620 Dual 5kW 200µs SPN
76621 Dual 5kW 200µs RCD
76622 Dual 5kW 435µs SP
76623 Dual 5kW 435µs SPN
76624 Dual 5kW 435µs RCD
76631 Single 10kW 200µs SP
76632 Single 10kW 200µs SPN
76633 Single 10kW 200µs RCD
76634 Single 10kW 435µs SP
76635 Single 10kW 435µs SPN
76636 Single 10kW 435µs RCD

Filler Modules (No Electronics)

76588 Single Filler
76697 Row Filler Module

Philips Strand Lighting

Dallas

10911 Petal Street
Dallas, TX 75238
Tel: +1 (214) 647-7880
Fax: +1 (214) 647-8031

Auckland

19-21 Kawana Street
Northcote, Auckland 0627
New Zealand
Tel: + 64 9 481 0100
Fax: + 64 9 481 0101

www.strandlighting.com

© Philips Group 2013
All rights reserved.
The Company reserves the right to make any variation in design, construction or descriptions contained herein, of the equipment, at any time without prior notice. E&OE

Asia

Unit C, 14/F,
Roxy Industrial Centre
No. 41-49 Kwai Cheong Road
Kwai Chung, N.T., Hong Kong
Tel: +852 2796 9786
Fax: +852 2798 6545

Europe

European Service & Distribution Centre
Rondweg zuid 85
Winterswijk 7102 JD
the Netherlands
Tel: +31 (0) 543-542516