

Last information update: November 2024

Product configuration: QY31.12+QX58.01

QY31.12: LED module - L 2384 - 78° - up (40%) and down (60%) emission - high output - neutral white - integrated DALI dimmable control gear - Aluminium

QX58.01: IN60 MMO - Up and Down Module - Minimal - L= 2384 - 4000K - CRI 80 - White

**Product code**

QY31.12: LED module - L 2384 - 78° - up (40%) and down (60%) emission - high output - neutral white - integrated DALI dimmable control gear - Aluminium

Technical description

LED module set up for housing in IN60 MMO up (40%) and down (60%) emission system profiles. The raster is made of metallised thermoplastic. The luminaire generates a down emission with controlled luminance $L \leq 3000 \text{ cd/m}^2 - \alpha > 65^\circ$, for use in environments with video monitors in compliance with EN 12464-1. The version is High Output. Supplied with DALI dimmable electronic control gear. Neutral white LED (4000K), CRI80.

Installation

Module insertion on compartments with a mechanical easy-push system (steel snap-on springs).

Colour

Aluminium (12)

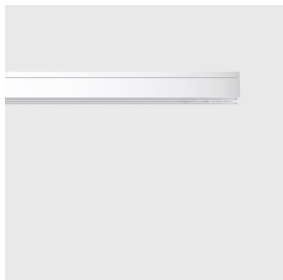
Weight (Kg)

1.9

Wiring

Quick coupling input terminal block connection. LED module complete with integrated DALI control gear. The electrical cables used are made of a "halogen free" material.

Complies with EN60598-1 and pertinent regulations

**Product code**

QX58.01: IN60 MMO - Up and Down Module - Minimal - L= 2384 - 4000K - CRI 80 - White

Technical description

The L profile=2384 mm is made of extruded aluminium. This is the Minimal version for up (4000K and CRI80) and down emission. The product can be used for pendant applications; in both a stand alone version and when the product is used in continuous lines.

Installation

Installation can be pendant-mounted using suitable accessories to be ordered separately. The modules are completed with end caps and rasters with LEDs to be ordered separately.

Colour

White (01)

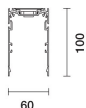
Weight (Kg)

4

Mounting

ceiling recessed|wall surface|ceiling pendant

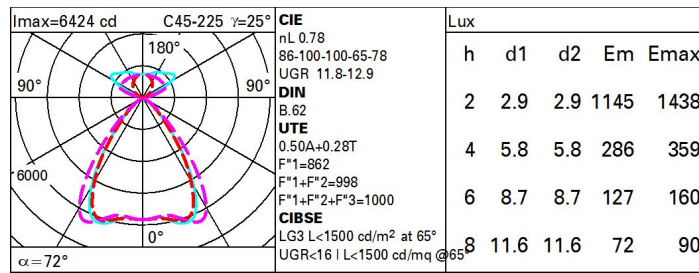
Complies with EN60598-1 and pertinent regulations

**Technical data**

Im system:	13689
W system:	82
Im source:	17550
W source:	82
Luminous efficiency (Im/W, real value):	166.9
Im in emergency mode:	-
Total light flux at or above an angle of 90° [Lm]:	4851
Light Output Ratio (L.O.R.) [%]:	78
CRI (minimum):	80
Colour temperature [K]:	4000
MacAdam Step:	3

Lamp code:	LED
Number of lamps for optical assembly:	1
ZVEI Code:	LED
Number of optical assemblies:	1
Power factor:	See installation instructions
Inrush current:	53 A / 200 µs
Maximum number of luminaires of this type per miniature circuit breaker:	B10A: 8 luminaires B16A: 13 luminaires C10A: 13 luminaires C16A: 22 luminaires
Minimum dimming %:	1
Overvoltage protection:	2kV Common mode & 1kV Differential mode
Control:	DALI-2

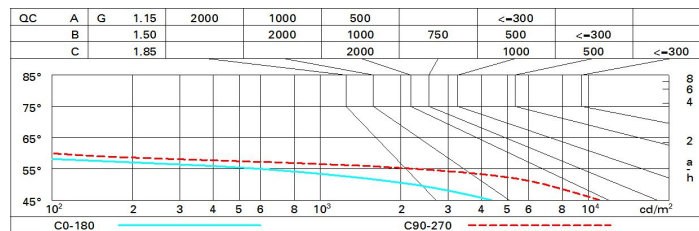
Polar



Utilisation factors

R	77	75	73	71	55	53	33	00	DRR
K0.8	54	49	45	42	45	42	40	34	68
1.0	58	53	50	47	49	47	43	37	74
1.5	64	60	57	54	55	53	49	42	83
2.0	67	64	61	59	58	56	52	44	88
2.5	69	66	64	62	60	59	54	46	92
3.0	70	68	66	65	62	61	55	47	94
4.0	71	70	68	67	63	62	57	48	96
5.0	72	71	70	69	64	63	58	49	97

Luminance curve limit



UGR diagram

Corrected UGR values (at 17550 lm bare lamp luminous flux)												
Reflect.: ceiling/cav walls work pl. Room dim x y		0.70	0.70	0.50	0.50	0.30	0.70	0.70	0.50	0.50	0.30	0.30
		0.50	0.30	0.50	0.30	0.30	0.50	0.30	0.50	0.30	0.30	0.30
		0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
		viewed crosswise					viewed endwise					
2H	2H	12.7	13.2	13.4	13.9	14.8	13.8	14.3	14.5	15.0	15.9	
	3H	12.4	12.9	13.2	13.7	14.6	13.6	14.1	14.4	14.8	15.7	
	4H	12.3	12.8	13.1	13.5	14.5	13.5	13.9	14.3	14.7	15.6	
	6H	12.2	12.6	13.0	13.4	14.4	13.4	13.7	14.2	14.5	15.5	
	8H	12.2	12.5	13.0	13.3	14.3	13.3	13.7	14.1	14.5	15.5	
	12H	12.1	12.5	12.9	13.3	14.3	13.2	13.6	14.1	14.4	15.4	
4H	2H	12.4	12.8	13.2	13.6	14.5	13.5	13.9	14.3	14.7	15.6	
	3H	12.1	12.5	13.0	13.3	14.3	13.2	13.6	14.1	14.4	15.4	
	4H	12.0	12.3	12.8	13.1	14.2	13.1	13.4	14.0	14.3	15.3	
	6H	11.9	12.1	12.7	13.0	14.0	13.0	13.3	13.9	14.1	15.2	
	8H	11.8	12.0	12.7	12.9	14.0	12.9	13.2	13.8	14.0	15.1	
	12H	11.7	11.9	12.6	12.8	13.9	12.8	13.1	13.7	13.9	15.0	
8H	4H	11.8	12.0	12.7	12.9	14.0	12.9	13.2	13.8	14.0	15.1	
	6H	11.7	11.9	12.6	12.8	13.9	12.8	13.0	13.7	13.9	15.0	
	8H	11.6	11.8	12.5	12.7	13.8	12.7	12.9	13.6	13.8	14.9	
	12H	11.5	11.7	12.4	12.6	13.7	12.6	12.8	13.6	13.7	14.8	
12H	4H	11.7	11.9	12.6	12.8	13.9	12.8	13.1	13.7	13.9	15.0	
	6H	11.6	11.8	12.5	12.7	13.8	12.7	12.9	13.6	13.8	14.9	
	8H	11.5	11.7	12.4	12.6	13.7	12.6	12.8	13.6	13.7	14.8	
Variations with the observer position at spacing:												
S =		1.0H	3.9 / -11.5					3.1 / -9.1				
		1.5H	5.5 / -26.7					5.4 / -27.3				
		2.0H	7.4 / -26.7					7.4 / -27.7				