

Led Status	Internal controller with 4 driving modes	
1	100%	Continuous use
2	200%	Semi-continuous use
3	270%	Strobe use
4	10-100%	Analog Reg

Internal Controller with **4 driving modes**

Develop your custom solution

18 Standard Colours

Base IP54 Protection Degree

Variant IP65 Protection Degree

24 Vdc

Optional Polarizing Filter

CE RoHS

UK CA

Illuminator Features :

- Project achieved by internal resources and Genesi skills; Designed for machine vision applications with linear or matrix cameras;
- Fast controller which allows to have the following modes: continuous use, semi-continuous use, strobe (PNP, NPN), analog regulation.
- Microcontroller to monitor the pulse duration and the maximum temperature;
- Model GX with 5° Lens or transparent covers;
- Model GXML designed with interchangeable lens position to achieve 4° to 45° light beam;
- Model GXB for backlight function with satin, transparent or opaline covers;
- Powerful and Fast strobe mode with energy buffering and strobe duration control, min. pulse from 1 µs;

COLOUR	WHITE		UV-A				VISIBLE					NIR			SWIR				
Led Colour	White 6000K	White 4000K	UV 365nm	UV 385nm	UV 395nm	UV 405nm	Blue 450nm	Green 524nm	Red 625nm	Deep Red 660nm	IR 730nm	IR 850nm	IR 950nm	SWIR 1050nm	SWIR 1200nm	SWIR 1300nm	SWIR 1450nm	SWIR 1550nm	SWIR 1600nm
	-6K	-4K	-365	-385	-395	-405	-450	-524	-625	-660	-730	-850	-950	-1050	-1200	-1300	-1450	-1550	-1650
Continuous use power	100 %		100%				100%					100%			100%				
Semi-continuous use power	200 %		200%				200%					200%			200%				
Strobe use power	270 %		270%				270%					270%			270%				



Genesi LUX®

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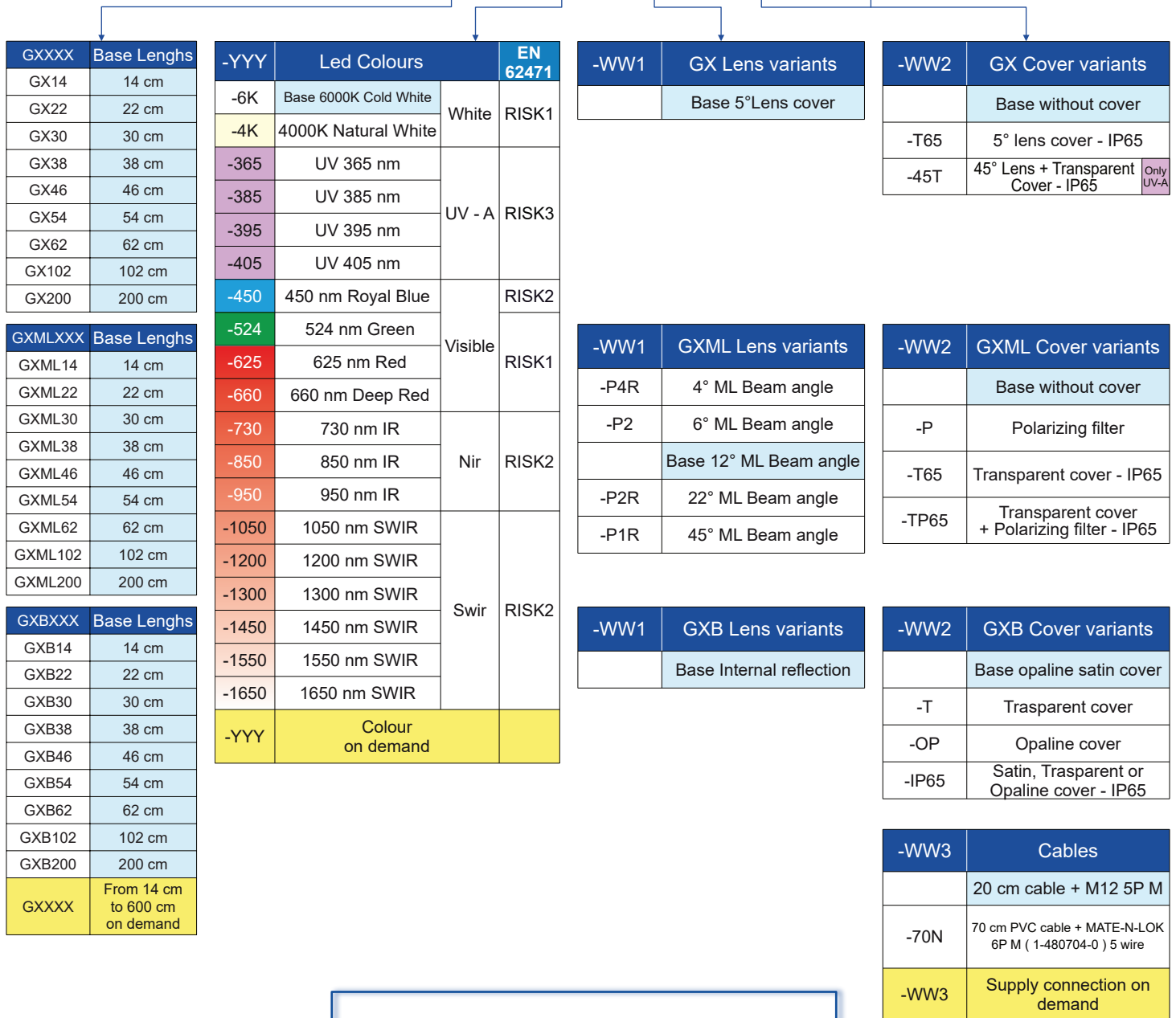


Organization with a certified ISO 9001:2015 Quality Management System

Rev. 01/25

GX Part Number

Ex. Code : **GXXXX** - **YYY** - **WW1** - **WW2** - **WW3**



Not all combinations are available

Part Number Examples:

GX14-6K
Power bar 4 Driving Modes 14 cm White 6000K 5° Lens cover 1080/3000Lm 0,3/0,8A 7,2/20W 20cm cable M12 M 5P

GXML30-850
Power bar 4 Driving Modes 30 cm IR 850nm 12° multi-lens (4°-45°) cover 0,9/2,4A 22/58W 20cm cable M12 M 5P

GXB78-850
Power bar & backlight 4 Driving Modes 78 cm IR 850nm Opaline satin cover 2,5/7,2A 60/173W 20cm cable M12 M 5P



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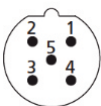


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Rev. 01/25

OPERATING MODE

100% CONTINUOUS USE


Connector	PINS	Function	Description
	1	+24 V	A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V; For the continuous use: it is possible to connect PIN4 directly to +24 V or PIN2 to GND
	2	A) Start NPN: 0-1 V	
	3	GND	
	4	B) Start PNP: 3-24 V	
	5	-	

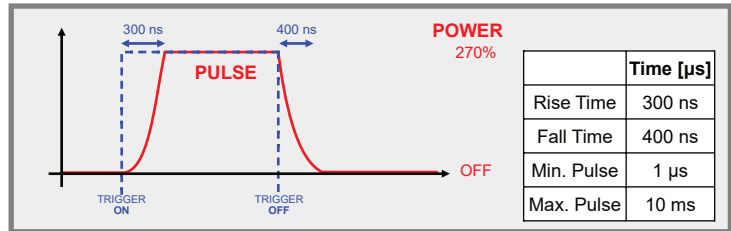
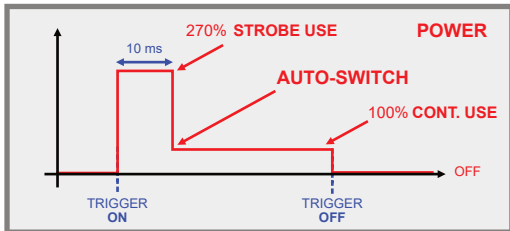
200 % SEMI-CONTINUOUS USE

Connector	PINS	Function	Description
	1	+24 V	Precondition: PIN5: 24 V A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V; In this mode → Ton_{max} = 60 s - Dt_{max} = 50% For the semi-continuous use: it is possible to connect PIN4 directly to +24 V or PIN2 to GND. To use it in continuous mode with DT _{max} from 51% to 100%: it is necessary to use the heat sink or forced ventilation.
	2	A) Start NPN: 0-1 V	
	3	GND	
	4	B) Start PNP: 3-24 V	
	5	+24 V	


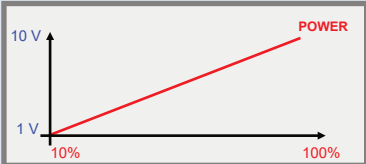
270% STROBE USE

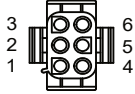


Connector	PINS	Function	Description
	1	+24 V	A) START NPN → PIN2: 0 to 1 V; B) START PNP → PIN4: 3 to 24 V; In this mode → Ton_{max} = 10 ms - Dt_{max} = 10% AUTO-SWITCH in continuous use.
	2	A) Start NPN: 0-1 V	
	3	GND	
	4	B) Start PNP: 3-24 V	
	5	-	



ANALOG REGULATION USE 100%

Connector	PINS	Function	Description
	1	+24 V	PIN5 from 1 to 10 V can adjust the power from 10% to 100%. 
	2	-	
	3	GND	
	4	-	
	5	1 V - 10 V	

Connector	PINS	Function
	1	+24 V
	2	Start PNP: 3-24 V
	3	Start NPN: 0-1 V
	4	Analog 1 V - 10 V
	5	GND



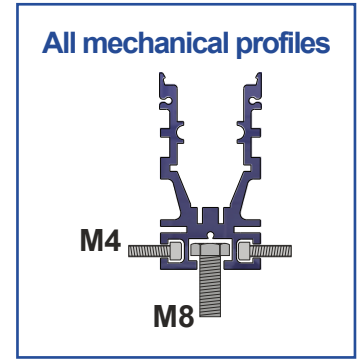
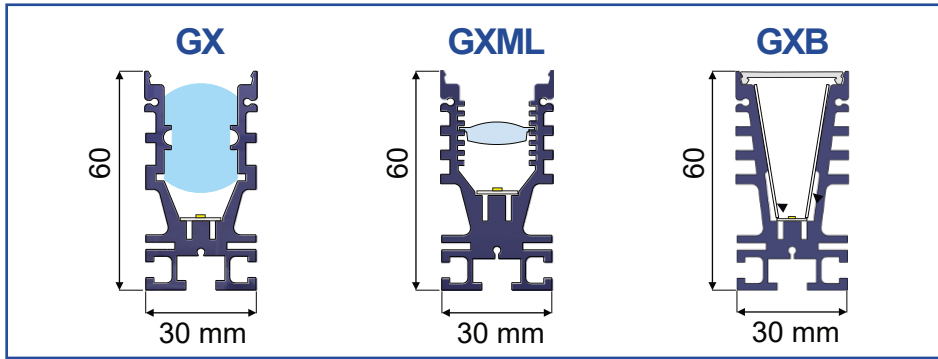
270% STROBE USE POWER can be reached only from WHITE / VISIBLE / NIR LEDs, for other wavelengths check the power table at page 1.



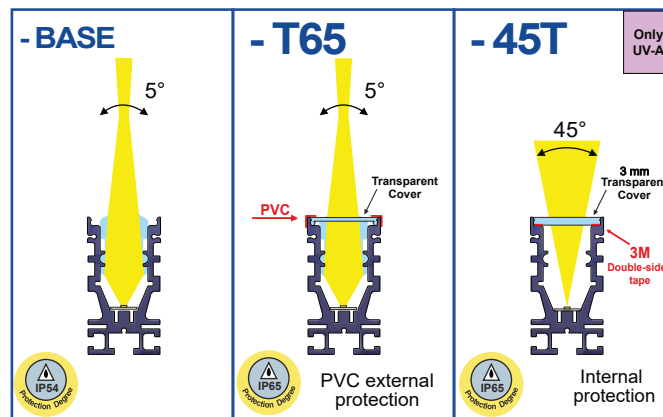
MicroController temperature protection → at 80° the PCB enables the protection and restores the functioning at T < 60°.

MECHANICAL DRAWINGS

FIXING



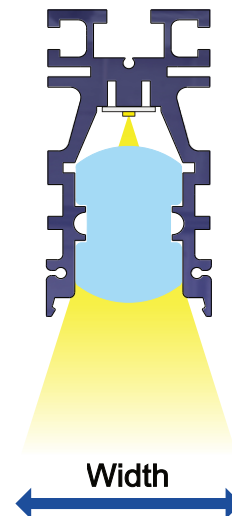
BEAM ANGLES AND COVERS GX



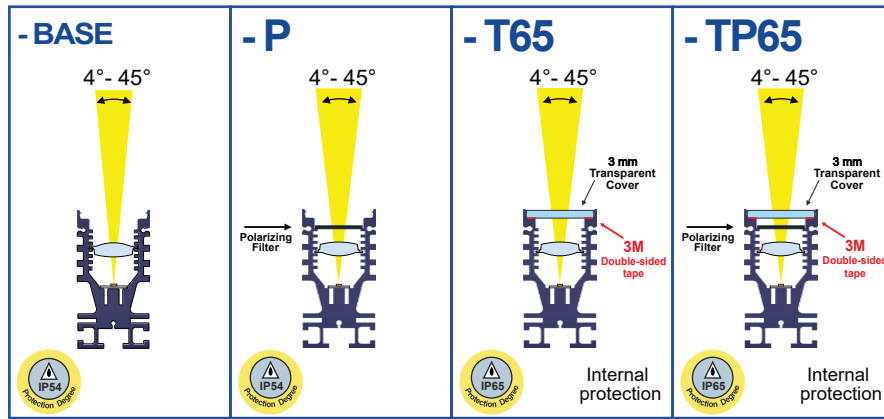
LIGHT PROJECTION GX

GX30-6K		
Working distance	Width mm	Power W/m ²
20 cm	12	433 - 860 - 1169
40 cm	20	165 - 330 - 445
100 cm	50	29,5 - 59 - 79,6

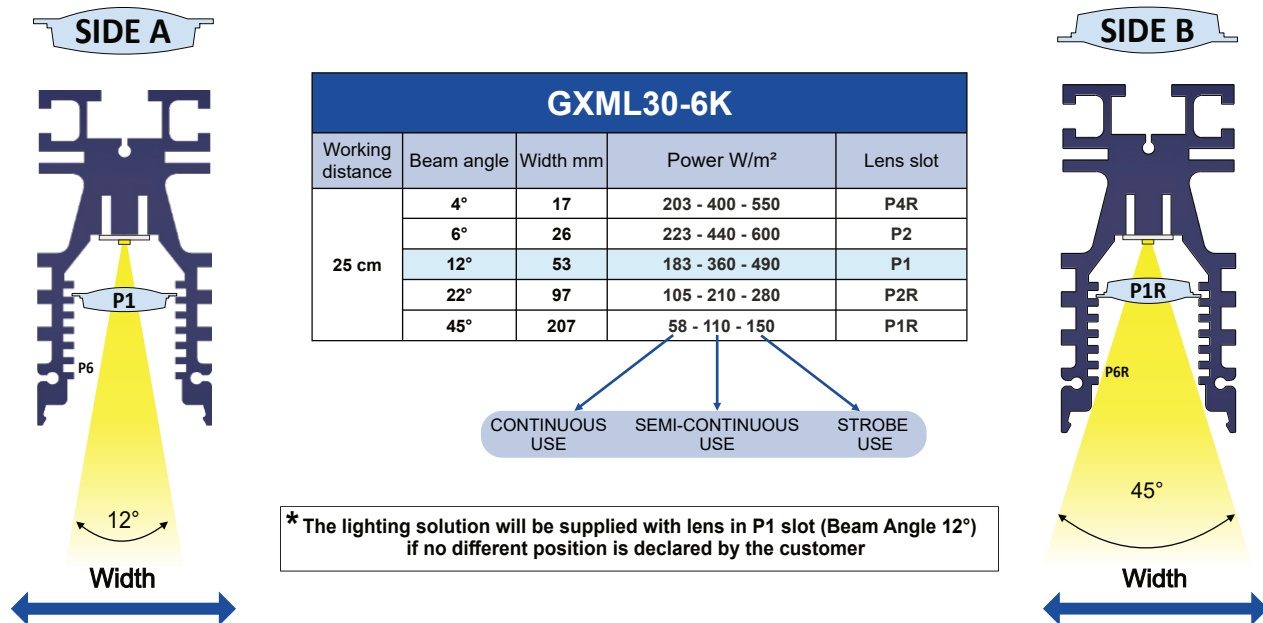
CONTINUOUS USE SEMI-CONTINUOUS USE STROBE USE



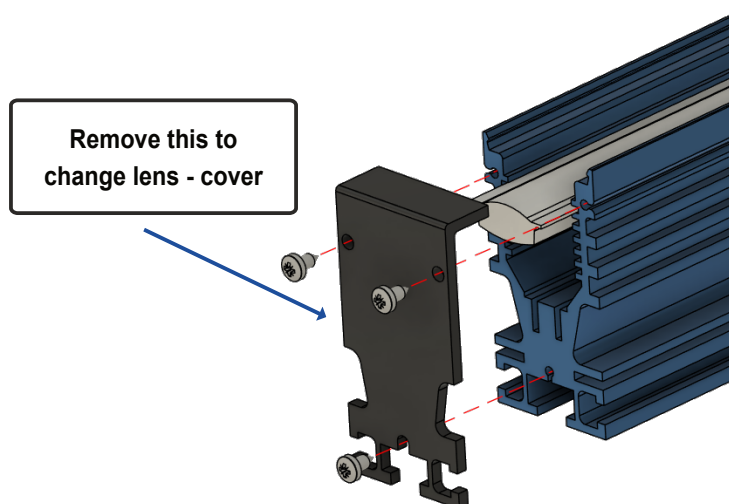
BEAM ANGLES AND COVERS GXML



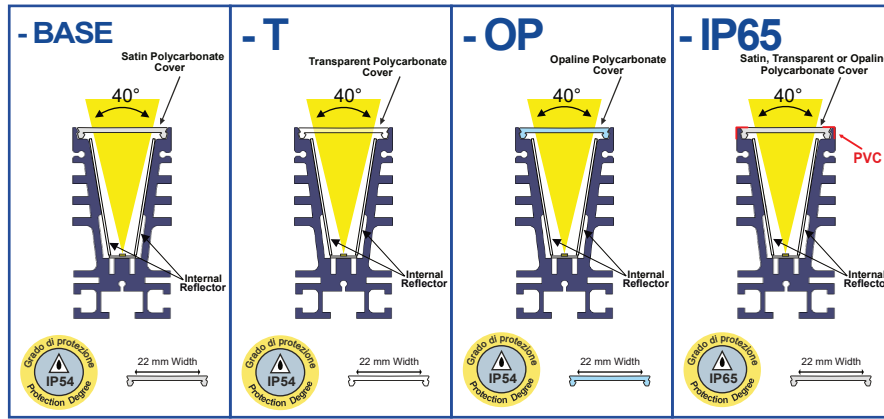
LIGHT PROJECTION GXML



HOW TO CHANGE THE LENS POSITION

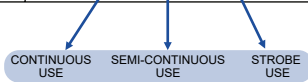


BEAM ANGLES AND COVERS GXB

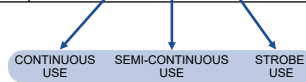


LIGHT PROJECTION GXB

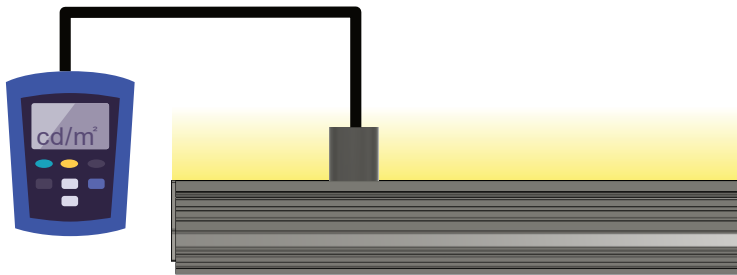
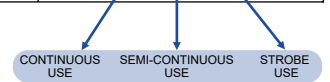
GXB30-6K	
Working Distance	Luminance cd/m ²
On Surface	100k - 200k - 270k



GXB30-6K-T	
Working Distance	Luminance cd/m ²
On Surface	320k - 600k - 840k



GXB30-6K-OP	
Working Distance	Luminance cd/m ²
On Surface	65k - 130k - 175k



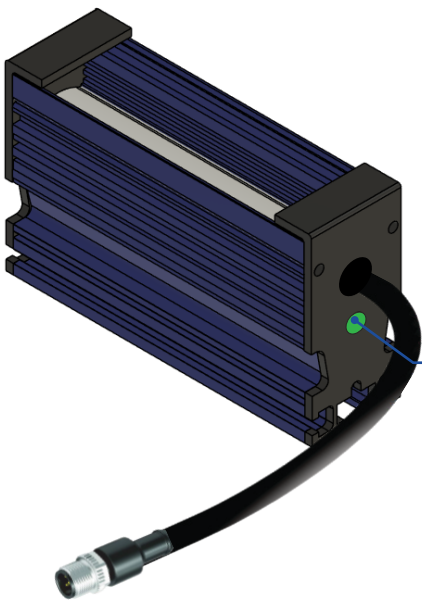
ACCESSORIES

CODE	DESCRIPTION
GE-M12F-5X050-2M	Female extension PVC Cable 5P 2Mt 0,5mm ² + M12 5P Female
GE-M12F-5X050-5M	Female extension PVC Cable 5P 5Mt 0,5mm ² + M12 5P Female
GE-M12F-5X050-10M	Female extension PVC Cable 5P 10Mt 0,5mm ² + M12 5P Female
GE-70N-2X1-3x035-2M	Female extension PVC Cable 5P 2Mt 2x1 + 3x0,35mm ² + Mate-N-LOK 6P Female
GE-70N-2X1-3x035-5M	Female extension PVC Cable 5P 5Mt 2x1 + 3x0,35mm ² + Mate-N-LOK 6P Female
GE-70N-2X1-3x035-10M	Female extension PVC Cable 5P 10Mt 2x1 + 3x0,35mm ² + Mate-N-LOK 6P Female
GE-ABS606E	6+1 channels Strobe Voltage Controller, Buffer 60A /1ms 24Vdc, Programmable ETH, Max cycle freq. over 500Khz
GE-ABS606C-CAT	6+1 channels Strobe Voltage Controller, Buffer 60A /1ms 24Vdc, Programmable Ethercat, Max cycle freq. over 500Khz

Tailor-Made

Connector	PINS	Function	Description
M12 Male	1		
	2		
	3		
	4		
	5		

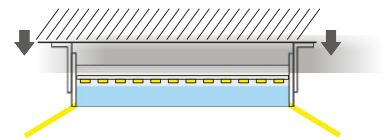
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LED STATUS

Mode	Led colour signal	Function/note
Powered	Blue	-
100% Continuous use	Green	-
0-100% Analog Reg	Yellow	-
270% Strobe Use	Fast blinking green	-
200% Semi-continuous use standby	Purple	Without PNP or NPN input only +24V analog IN
200% Semi-continuous use	Slow blinking purple	With PNP or NPN input +24V analog IN
Over 10% ton error	Fast blinking red	10 sec stop
Over 80° temperature in pcb controller	Slow blinking green-yellow-red	Up to < 60° stop

The indicated IP protection degree is guaranteed only if the product is positioned downward



STANDARDS

EMC immunity :	EN 61547:2009	
EMC emission :	EN 55015:2013 + A1	
Photobiologic risk :	EN 62471:2008 GLS: RISK 1	Only for white light, continuous use
Assessment of lighting equipment related to human exposure to electromagnetic fields	EN 62493:2015	

WARNING

-Electrical device exclusively for professional use. Installation can be done by qualified personnel only.
-In case of power supply wire damage, its replacement has to be done at the head office exclusively.

Warranty loss in case of inappropriate use and tampering.



Design & Production
Made in Italy



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