

LED

lighting of special application



2017

Made in Russia



Proton-Impulse

Proton-Impulse is a famous Russian company established in May, 1995, specialized in development and production of power electronics, LED indicator and lighting production. Compounds JSC Proton holding.

Enterprise quality management system is one of the first in Russia whichwas certified according to requirements of international standard ISO 9001:2008.

Two departments of R&D, three manufacturing departments

work todevelop and extend production range, realizing requirementsof different clients.

The products of Proton-Impulse are distinguished for reliability and high stable quality, proven by multistage quality system at the enterprise.

The company owns the modern production base, making able to run a full production cycle from development, blank production up to assembly and tests.

Proton-Impuls emanufactures

1.Lighting production:

- LED lamps indicator lamps SKL, lighting semiconductor lamps LPO, alarm lamps, LED tube lamps(T8) and LED lamps with socles E10, E14, E27, B9S, B15S, B15D.
- LED energy saving lamps (including illumination for refrigerating and trade equipment, household refrigerators, lift cabins, for Russian railway, housing and utilities infrastructure and for internal lighting).

Lighting production has obvious advantages and low energy consumption is only one of them. We realize continuous monitoring of the changing requirements of the regional companies and develop new series of lamps and lighting.

2. Power electronics:

- · optoelectronic solid-state relays and specialized devices and relays;
- thyristorpower control;
- USO modules (input and output) and power modules;
- · energy saving (optical and acoustic) switches;
- automatic and control equipment devices (timers and blocks of the alarm system and control for refrigerating system management);
- · àutomatic reserve "BUP";
- · cargo weighing GVU device for continuous freight weight measurement in an elevator cabin.

Power effective process control systems are hard to develop without devices of modern power electronics. The semiconductor devices released by us are ofhigh speed response, small power failure (in an open state), small current (the closed state), portability and small weight.

Our regular clients are among such large companies as:Moselectroshield, Electroshield Company Group, JSC Russian Railways, JSC Tver Carriage Works, PAO KAMAZ, PAO NLMK, Shcherbinsky and Karacharovskyelevator plants, PAO Severstal, PAO MMC Norilsk Nickel, PAO Transneft, PAO Tatneft, many other power electro plants and companies.

«Frost» line

«Frost» LED lighting line for commercial and refrigerating machinery

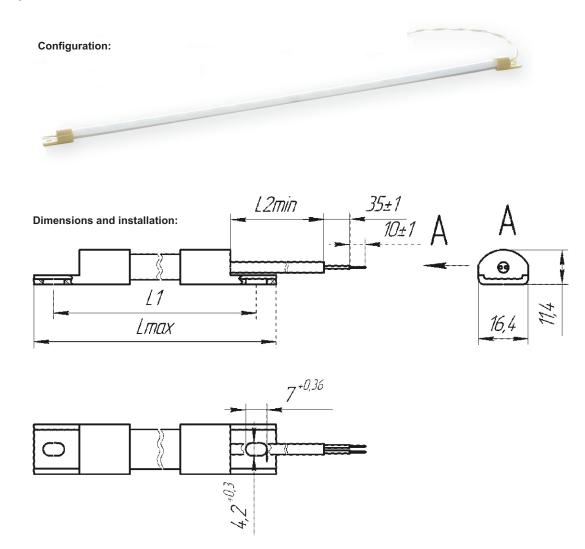
«Frost» line lighting has been designed for usage in racking equipment and commercial refrigerating machinery.

Lighting has modern design, and shockproof housing is a very important feature during the process of exploitation in racking equipment and commercial refrigerating machinery.

Lighting provide:

- · Highen ergy saving;
- Operation in wide range of ambient temperature from 30 °C up to + 50 °C;
- · High quality color rendering for showing product look;
- Vibrant resistant;
- · Do not need extra utilization;
- Long lifetime 50 000 hours.

During installation in commercial equipment, the housing of the lighting is equipped with simple and secure mounting.



«Frost» lighting parameters can be modified in accordance with the customer demands.

«Frost-2» line

Parameter, UOM		Lighting type				
		SP-92-04	SP-92-06	SP-92-12	SP-92-14	
Dimension, mm	L max	463	663	1263	1463	
	L1	450 ± 1	650 ± 1	1250 ± 1	1450 ± 1	
	L2	400	600	1200	1400	
Voltage supply, V		24 DC				
Energy consumption, W		2,2	3,3	6,6	7,7	
Luminous flux, no less, lm		180	270	540	630	
Correlated color temperature, K		6500 ± 530				
Colour rendering index, CRI		> 80				
Lens type		Transparent				
Ingress protection		lp65				

«Frost-4» line

Parameter, UOM		Lighting type			
		SP-91-54	SP-91-92	SP-91-130	
Dimension, mm	L max	535	920	1310	
	L1	522 ± 1	907 ± 1	1297 ± 1	
	L2	415 1	1200	585	
Voltage supply, V		12 ± 0,5 DC			
Energy consumption, W		3,6	6,5	14,4	
Luminous flux, no less, lm		250	500	1100	
Correlated color temperature, K		6000∘7000			
Lens type		Opal			
Ingress protection		IP 65			
Emission color		White color			

Device for weighing (GVU)

Device for weighing (GVU) is designed for constant weighing of the load in the elevator car and signal transmission in case of overload according to the initial setting. It is installed in passenger, freight elevators and elevators of special application. The device consists of the unit of the strain sensor (BTD) and control and indication unit (BUI).

The main technical description is provided in the section 3.

BUI Technical Description

Parameter description	Value
Voltage supply, U, V	220 ± 22 AC
Frequency of voltage supply, Hz	50 ± 1
Energy input, no more, P, W	2
Range of freight weighing, kg	- 50 3200
Maximum full-scale accuracy of freight weighing, %	0,4
Quantity of contact output, pcs	3
Maximum commutated current of contact outputs, A	5 AC/DC
Maximum voltage capability of contact output	240 AC/DC
commutation, V	
Range of voltage analogue output, V	0 10 DC
Range of voltage of interlock input terminal, V	24 240 AC/DC

BTD Technical Description

Parameter description	Value
Quantity of strain sensor, pcs	4
1 strain sensor nominal load - I ifting capacity, kg	800
Total load - lifting capacity, kg	3200
Overload admissible, %	150
Extreme overload, %	200

Elevator cage illumination

CJSC "Proton - Impulse" is a supplier of elevator lighting suitable for elevators, produced by the principal manufacturers in Russia.

We have possibilities to elaborate any LED lighting and LED module for elevators, both of economy and VIP type.



