

## TECHNICAL DATA SHEET GKLCF LOAD CELL PROTECTOR



### Product Description:

The Gatekeeper GKLCF has been developed to offer over-voltage protection to sensitive strain gauge based load cells and signal conditioners. It is configured to provide voltage clamping across the strain gauge outputs as well as the excitation voltage from the signal conditioner. A low capacitance connection to earth helps to avoid earth loops, whilst providing a reliable current path under transient conditions.

### Features:

- For 4 or 6 wire applications
- Fully self-contained in IP65 enclosure
- Protects both signal and supply lines
- Fast acting

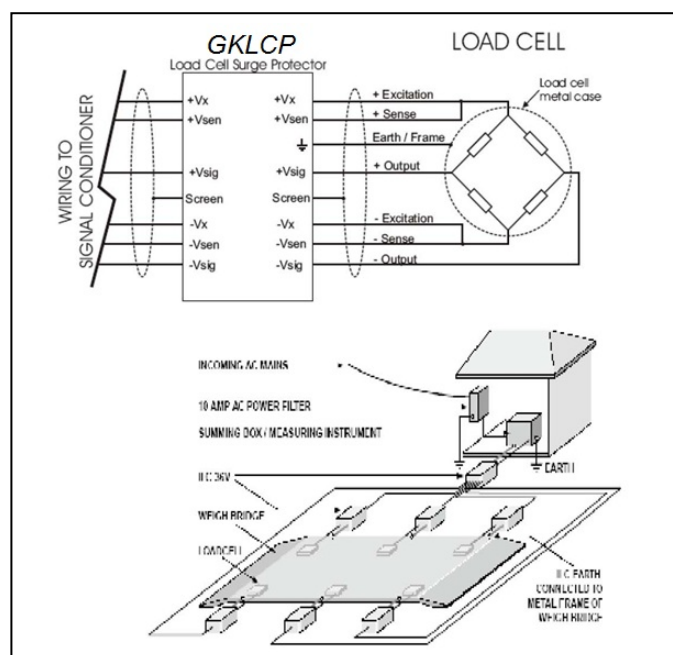
### Operation:

The ILC36V transient protectors are designed for the protection of sensitive strain gauge based measuring equipment from the damaging effects of lightning surges, transients and RF interference.

The lines are protected by shunt -connected, common-mode over-voltage transient diodes. These diodes connect from each protected line to the cable screen pin. An additional diode is used to provide transverse mode protection across the load cell bridge output. The cable screen pin is then connected to earth via a low capacitance gas filled arrestor. In this way noise via device capacitance is eliminated.

### Application:

The ILC36V load cell surge protector is designed for use with load cells using four wire or six wire connections to a strain gauge bridge. It is installed in series with the line to be protected.



ORDER CODE		GKLCF	
<b>Electrical Specification:</b>		Load Cell Protection	
Application:		Series	
Connection type:		Series	
Nominal voltage (Vdc):	$U_n$	18	
Clamping Voltage (Vdc):		36	
Nominal Discharge Current (8/20 $\mu$ s, A):	$I_n$	150	
Maximum Discharge Current (8/20 $\mu$ s, KA):	$I_{max}$	10	
Maximum Discharge Voltage (8/20 $\mu$ s, V) (A) $U_p$	Line - Shield	90V	
Response time (nS):	Line - Line	1	
Loop Resistance (Ohm)		0	
Operating temperature range:		-25 <sup>0</sup> - +70 <sup>0</sup>	
Standard Compliance (Tested):		IEC 61643: 21-2005	
Surge Tested To:		ANSI C62.41 Cat A, Cat B, Cat C, AS/NZS 1768-2007 Cat A, Cat B, Cat C	
<b>Mechanical Specifications:</b>			
Connection type:		Screw terminal	
Enclosure material:		Thermoplastic: extinguishing degree UL94 V-0	
IP index:		IP 65	
Length		110 mm	
Width:		80mm	
Depth:		67mm	