WDC-810C1

●For rolling mill and tension control

Instrumentation Controller

Thin design and suitable for compression and tension control

●Easy to match necessary I/O signals as a compression controller
●Setting though keyboard simplifies operation commands and operation
●For wide range of applications

Measuring Instrument Controller is suitable to measure compression and tension load detected by load transducers that are mounted on a steel mill. It is a load transducer amplifier to output voltage and current signals according to a certain format specified in CPU. Because of its thin design, it is used together with different transducers. Through keyboard, users can carry out settings and command input. The controller not only outputs basic form of A-side and B-side rolling loads (A and B outputs separately), rolling roads (A+B and output), rolling load balance (A-B output), but also output plus only, minus only or plus and minus. It is able to output according to the requirements of lines. This controller not only has 1 CPU, but has output for 8 systems including CPU for measuring instruments, control and electrical system.

Setting values are written in non-volatile memory in case power cut. Users do not need to use keyboard to input constants again. Meanwhile, it is able to adopt a flexible corresponding method for compression load measurement and load transducer measurement or control.

Specifications

●Basic specifications

Power Supply	100 VAC
Insulation Resistance	AC line-case, use 500 V isolated resistor,
	1000 MΩ or more
Withstand Voltage	AC line-case, 1500 VAC 1 min
Operating Temperature	0 to 40°C
Operating Humidity	20 to 85% RH (Non-condensing)
Storage Temperature	-10 to 55°C, 90% RH or less (Non-condensing)
Temperature Stability	ZERO: ±0.02%/°C, sensitivity: ±0.02%/°C
Dimensions	49 W × 348 H × 250 D mm
Weight	Approx. 3.3 kg

●Load Cell Amplifier

Channels	2 (A-side, B-side)
Applicable Transducers	Load Cells
Connected Transducers	Up to 4 of 350 Ω Load Cells connected in parallel
Bridge Excitation	10 VDC±2% Remote sensing possible
Measuring Range	±2.5 mV/V
Sensitivity	0.25 mV/V to 2.5 mV/V (Output 10 V)
Nonlinearity	±0.05%FS
A/D converter	16 bits
Zero Adjustment	±1.0 mV (Hardware zero adjustment)
	counter measuring range
Span Adjustment	Setting by 0.25 mV/V to 2.5 mV/V key input
Calibration	50% output to measuring range

●Control Input Interfaces

Input Points	11
Input Modes	Non-voltage contact
Photocoupler	Reversed withstand voltage 6 V max.
	Current 80 mA max.
	Power consumption 120 mW max.
Input	· ZERO
	· CAL
	· A×2
	· B×2
	· INTERLOCK OFF
	· HIGH
	· Sensitivity selection 1 to 5

●Control Output Interfaces

Output Points	11 points
Output Modes	Open collector
	Collector current 100 mA max.
	Withstand voltage between collector and emitter
	30 V max.
Output Contents	Load on 1 (LOAD ON1)
	Load on 2 (LOAD ON2)
	Overload 1 (OVER LOAD1)
	Overload 2 (OVER LOAD2)
	Response: Auto zero adjustment, in A×2, B×2, HIGH, CAL
	Normal (HEALTHY)
	Error (ERROR)

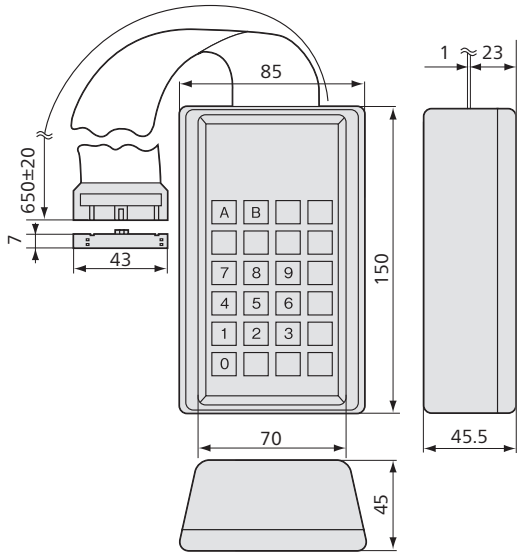
●D/A Converter (16 bits) and Current/Voltage Buffers

Input Points	8 (16 bits)
Nonlinearity	±0.05%FS
Buffer Output	None
	0 to ±5 V
	4 to 20 mA
	0 to ±10 V
Output Type	None
	A-alone output
	B-along output
	A+B and output
	A-B polarity difference output

●WDC-810B-KB keyboard (Option)

Function Keys	Channel Key	(A) (B)
	Key 0	(ZERO)
	CAL key	(CAL)
	Port Selection Key	(PORT)
	Display Key	(DISPLAY)
	Mark Key	(F0) (F1)
	Number Key	(0) (1) (2) (3) (4) (5) (6) (7) (8) (9)
	Load Key	(LOAD ON)
	Overload Key	(OVER LOAD)
	Gain Key	(GAIN)
	Clear Key	(CLR)
	Return Key	(ENT)
Dimensions	85 W × 150 H × 45.5 D mm	

■keyboard Dimensions



Dimensions of Keyboard

■Dimensions