F08-9026-S2
Instrumentation Controller

Highly Universal Controller for tension and compression

Instrumentation controller is for 2-input for compression and tension control in a steel mill. It can display plus/minus calculation results through analog output and wide analog meters.

It is a highly universal instrumentation controller with unilateral operation function, stands switchover function, comparison function and peak hold function.
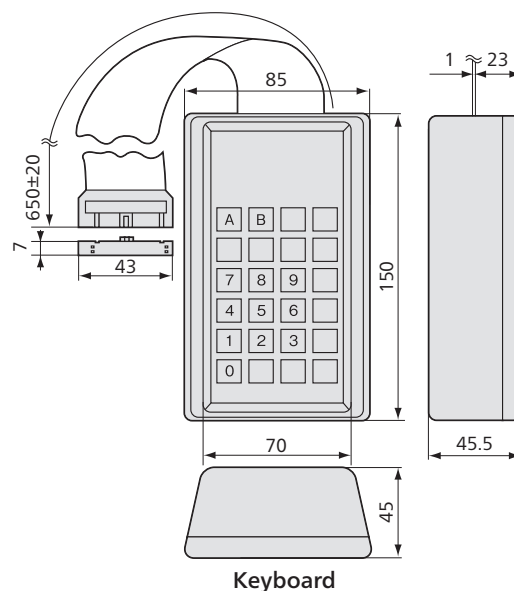
Specifications

Channels	2 (LOAD A, LOAD B)
Applicable Transducers	87.5 to 700 Ω
Additional Bridge Voltage	10 VDC±2%
Remote Sensing	Cable resistance 10 Ω or less
Measuring Range	±2.5 mV/V
Sensitivity Adjustment Range	0.25 mV/V to 2.5 mV/V
Zero Adjustment Range	±1 mV/V (Hardware zero adjustment)
	Count zero (Auto zero balancing) measuring range
Nominal Value (CAL)	50% output for relative measuring range
Frequency Response	10, 500 Hz (Cutoff point)
Nonlinearity	±0.05% FS (Output voltage from amplifier)
Zero Stability	±0.02% FS/°C (1 mV/VFS)
Sensitivity Stability	±0.02%/°C (1 mV/VFS)
A/D Conversion Speed	Sampling Frequencies 4 kHz, 2 k Hz for
	2 channels each
	Resolution: 16 bits
D/A Output	±10 V, ±5 V (Load resistance 2 kΩ or more)
	4 to 20 mA (Load resistance 500 Ω or less)
	Sets each port by any key input possible
	Current output switchable by switch on main port
	Mainframe isolation output, isolated withstand voltage
	500 VAC, 1 min.
Resolution	16 bits
Output Points	Mainframe: 4 ports, additional: 4 ports, total 8 ports
	isolated between 4 mainframe ports and 4 additional
	ports output (No. 6 and No. 7 ports are for analog monitor)
Output Modes	A-alone, B- alone, A+B and A-B
	Each port is set randomly
Nonlinearity	Within ±0.1%FS
Analog Monitor	For total value: 0 to 100 (%)
	For difference value: -50 to 50 (%)
ROM	128 k flash memory
Interfaces	PPI (CN5): For keyboard of WDC-810B-KB
	EIA-232-D (For maintenance)

Comparison Output

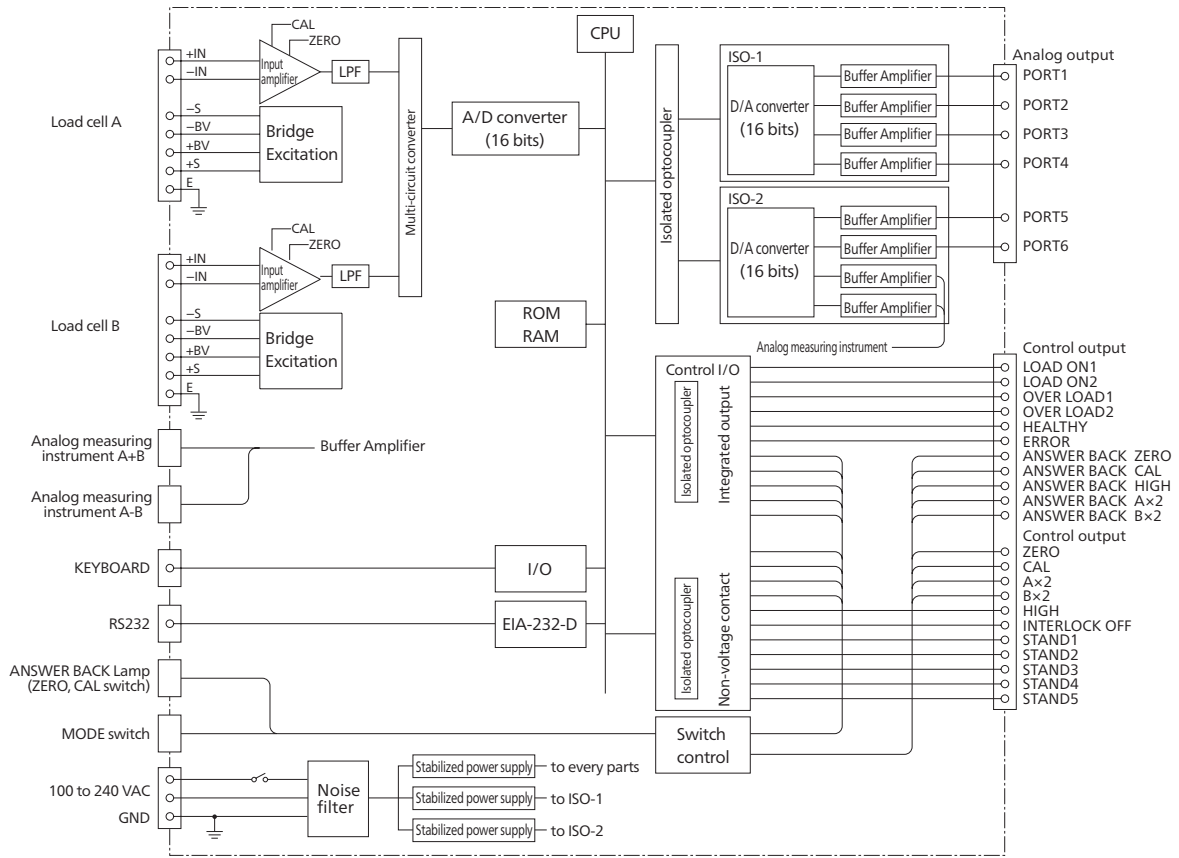|	
Comparison Output	
4 points, open collector output LOAD ON 1, LOAD ON 2, OVER LOAD 1, OVER LOAD 2	
Condition settings: Using a keyboard of WDC-810B-KB	
Setting items: comparison value (%), comparative mode (A/B-alone, plus, minus). A-alone for comparator, B-alone, A+B, A-B, random setting)	
Max. input voltage: 30 V Residual Voltage: 1 V or less	
Max. load current: 100 mA	
Control Output	7 points, open collector output
	Response (ZERO, CAL, A×2, B×2, HIGH)
	POWER ON HEALTHY, CPU ERROR
Control Input	11 points (Non-voltage contact), Auto zero command (ZERO)
	CAL command
	Unilateral operation (A×2, B×2 command)
	Interlock OFF command
	Standard switch over 5 points (Memory management sensitivity registered value and ZERO value)
	Gain command (HIGH)
Peak Hold Action	Peak hold action is set by keyboard
	Setting through PORT
	① when strain capacity is over baseline value, clear previous hold value, setting time is (1 to 9.9 s), zero display
	② Measure through peak hold after setting time
	③ Baseline value and setting time are set by keyboard input
	Setting value is used together with each PORT
Power Supply	100 to 240 VAC
Operating Temperature	-10 to 55°C
Operating Humidity	20 to 85% RH (Non-condensing)
Weight	Approx. 5 kg

●Keyboard WDC-810B-KB (Optional)

Function Keys	Channel Key	〔A〕〔B〕
	Key 0	〔ZERO〕
	TAB 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

Keyboard

Instrumentation Amplifiers

■Block Diagram

■Dimensions