VM-5 SERIES MONITOR

SPECIFICATIONS

MODEL VM-55 VIBRATION MONITOR

Model Code / Additional Spec. Code(No entry if additional spec. code is not specified.)

VM-55-□ 1 □□□□ - □□□

Monitor range		Input signal CH1		Input signal CH2		Output signal *1		Rectification		Recorder output		Alarm reset (DANGER)		Alarm reset (ALERT)		Alarm reset (OK)	
3	0 to 200μm pk-pk	1	VK-202A FK-202F	1	CV-86	1	CH1 : REL CH2 : ABS	0	Average value	0	4 to 20mADC	0	AUTO-RESET	0	AUTO-RESET	0	AUTO-RESET
4	0 to 400μm pk-pk			2	CV-88			1	pk to pk	1	1 to 5VDC	1	SELF-HOLD	1	SELF-HOLD	1	SELF-HOLD
5	0 to 500μm pk-pk					2	CH1 : REL CH2 : SEIS	2	rms (additional spec./RMS)	2	Output card (/IS□ or /RE□ option)						
6	0 to 800μm pk-pk																
8	0 to 10mils pk-pk					3	CH1 : SEIS CH2 : ABS										
A	0 to 15mils pk-pk																

Note) *1 ABS(Absolute vibration), REL(Relative vibration), SEIS(Seismic vibration)
SEIS: The output is converted from velocity signal to displacement signal

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Relay mode (DANGER)		Relay mode (ALERT)		Relay mode (OK)		Alarm delay time (DANGER)		Alarm delay time (ALERT)		Alarm output type		First out *2	
0	NORMALLY DE-ENERGIZED	0	NORMALLY DE-ENERGIZED	0	NORMALLY DE-ENERGIZED	0	3 sec.	0	3 sec.	1	CH1 : 2 points (DANGER1,ALERT1) CH2 : 2 points (DANGER2,ALERT2)	0	OFF
						1	1 sec.	1	1 sec.			1	ON
1	NORMALLY ENERGIZED	1	NORMALLY ENERGIZED	1	NORMALLY ENERGIZED	2	6 sec.	2	6 sec.				
						3	None	3	None				

Note) *2 It is necessary to set all monitor units in the same rack in first out function ON, when it is used first out function.

/RMS/(IS □ or RE □)/5G □ /TRP/EX □

rms. rectification	Isolate output		Recorder option output		Input power supply requirements		Tropical spec.	Sensitivity correction	
When rectification code 2 is selected, specify this option code.	0	4 to 20mADC	2	0 to -10VDC	0	85 to 264VAC		1	TIIS(IEC)
	1	1 to 5VDC	3	0 to 10VDC	1	24VDC		2	FM
	2	0 to -10VDC	4	0 to -5VDC	2	110VDC		4	CSA
	3	0 to 10VDC	5	0 to 5VDC				5	ATEX
	4	0 to -5VDC							
	5	0 to 5VDC							
	When recorder output code 2 is selected, specify this option code.								

Ordering Information

ALARM SET VALUE	DANGER1 : _____ ALERT1 : _____ DANGER2 : _____ ALERT2 : _____ Unless specified otherwise, preset to : DANGER : 100% of monitor range ALERT : 90% of monitor range
SEQUENCE SET VALUE (to increase alarm set value during operation of the sequence circuit)	: _____ ×1.0 to 10.0 (×0.1 step) Preset to ×1.0 unless specified otherwise. CAUTION : Set the alarm set value so that its designated multiple is within 110% of the measurement range during operation of the sequence circuit. If it's set to more than 110%, it may not output alarm.
SUPPRESSION FUNCTION SET VALUE	: _____ 0.0 to 10.0 % of monitor range (0.1 % step) Preset to 2.0 % unless specified otherwise. CAUTION : When the measurement value is not more than suppression function set value, indication and recorder output value shall be as 0 %.
OTHERS	

Standard Specifications

ALARM SET POINT	4 points (DANGER1,ALERT1,DANGER2,ALERT2)
ALARM SET RANGE	0 to 110% of monitor range
ALARM SET ACCURACY	± 3.0% of F.S. or less
ALARM SET REPEATABILITY	± 0.1% of F.S. or less
ALARM OUTPUT	5 points (DANGER1,ALERT1,ALERT2,DANGER2,OK)
MEASURED VIBRATION VALUE	Measurement value and alarm set value are indicated on the digital meter and bar graph meter simultaneously. LCD digital meter with 5 digits (7 segments, with back light) LCD bar graph meter (40 segments, with back light)

Standard Specifications

ALARM INDICATOR	DANGER : (red LED) ALERT : (yellow LED)
ABNOR. ALARM INDICATOR	OK : (green LED)
BYPASS INDICATOR	BYPASS : (red LED)
TRANSDUCER INPUT (SCALE FACTOR)	CH1 : VK-202A,FK-202F (787mV/100μm) CH2 : CV-86 or CV-88 (3.94mV/mm/s)
INPUT IMPEDANCE	Approx. 50kΩ
EXTERNAL CONTACT INPUT (FROM REAR PANEL)	Contact type : Dry contact Contact for external reset Contact for sequence
BAR GRAPH METER	Recorder output conversion accuracy ± 2.5% of F.S.
DIGITAL METER	Recorder output conversion accuracy ± 1.0% of F.S.
RECORDER OUTPUT CONVERSION ACCURACY	± 3.0% of F.S. at 100Hz at 25°C (77°F REF.) ± 5.0% of F.S. at 100Hz at 0 to 65°C (32 to 149°F REF.)
RECORDER OUTPUT (DC OUTPUT) (FROM REAR PANEL)	Voltage or current output proportional to monitor range 1 to 5VDC (output impedance : 250Ω) 4 to 20mADC (max. load resistance : 500Ω) 0 to -10VDC*,0 to 10VDC*,0 to -5VDC*,0 to 5VDC* (output impedance : 100Ω) (*option) Number of output points : 2 points
MONITOR OUTPUT (AC OUTPUT) (FROM FRONT, REAR PANEL)	Buffered REL output and buffered velocity transducer output, or buffered REL output and SEIS waveform output (787mV/100μm) Output impedance : 100Ω (load resistance 50kΩ or more)
FREQENCY RESPONSE	10 to 600Hz
TEMPERATURE RANGE	Operating temperature : 0 to 65°C (32 to 149°F REF.) Storage temperature : -30 to +85°C (-22 to +185°F REF.) Relative humidity : 20 to 95% (noncondensing)
MATERIAL AND FINISH	Face plate : Aluminum Munsell N-4.0 (equiv.)
MASS	Monitor : max.1.0kg (max.2.2lb REF.) (including single unit instrument rack : max.2.8kg (max.6.2lb REF.))

Note) The VM-55 vibration monitor is calibrated with simulated input signals and above shows specifications with the simulated inputs.
This monitor should not be calibrated as a loop with actual sensors.