PRODUCT NEWS

Product Discontinuation Notices

OMRON

Issue Date
Month Day, Year

Product Discontinuation		Recommended Replacement
Electric Power Monitoring Equipment		Electric Power Monitoring Equipment
KM1-PMU1A-FLK **KM1-PMU2A-FLK**	➡	**KM-N series**
KM1-EMU8A-FLK		**KM50 series**

[Final order entry date]

The end of March, 2024

[Date of The Last Shipping]

The end of June, 2024

[Scheduled date of maintenance close]

The end of June, 2025

[Caution on recommended replacement]

Since the format of the dedicated CT is different from the K M-N series, it is necessary to replace the CT and CT cable when replacing.
The KM-N series does not have an alarm output function or logging function.
The KM-N1-FLK cannot be screwed.
The KM50 series does not have a temperature measurement function.

[Difference from discontinued product]

Recommended replacement Model	Body Color	Dimen-sions	Wire connection	Mounting Dimensions	Charac-teristics	Operation ratings	Operation methods
KM-N2-FLK	**	--	--	--	--	--	--
KM-N3-FLK	**	--	--	--	--	--	--
KM50-C1-FLK	**	--	--	--	--	--	--
KM50-E1-FLK	**	--	--	--	--	--	--

** : Compatible
* : The change is a little/Almost compatible
-- : Not compatible
- : No corresponding specification

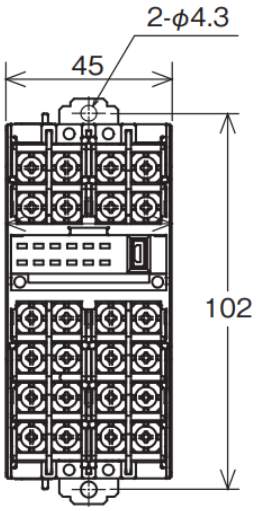
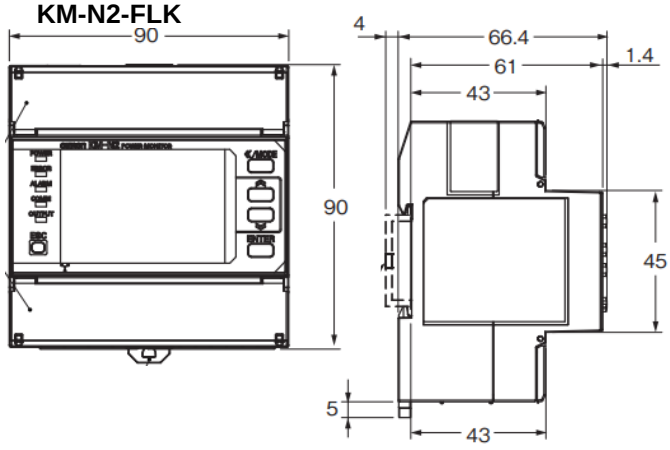
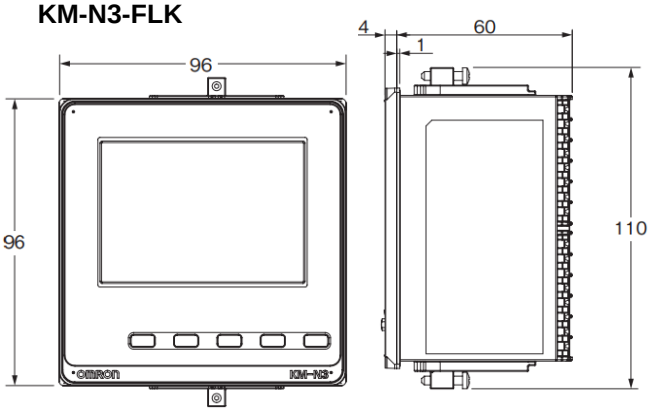
[Product Discontinuation and recommended replacement]

Product discontinuation	Recommended replacement
KM1-EMU8A-FLK	KM50-C1-FLK
	KM50-E1-FLK
KM1-PMU1A-FLK	KM-N2-FLK
	KM-N3-FLK
KM1-PMU2A-FLK	KM-N2-FLK
	KM-N3-FLK

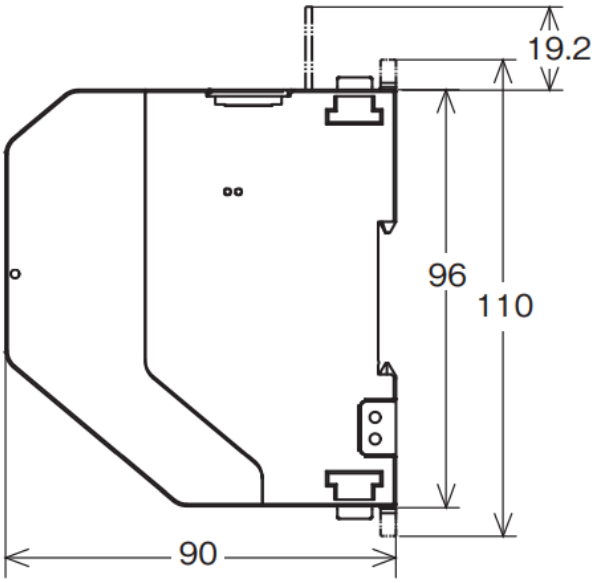
[Body color]

Product discontinuation KM1-PMU1A-FLK KM1-PMU2A-FLK KM1-EMU8A-FLK	Recommendable replacement KM-N series KM50 series
Black 	**Black** KM-N2-FLK  KM-N3-FLK  KM50-C1-FLK  KM50-E1-FLK 

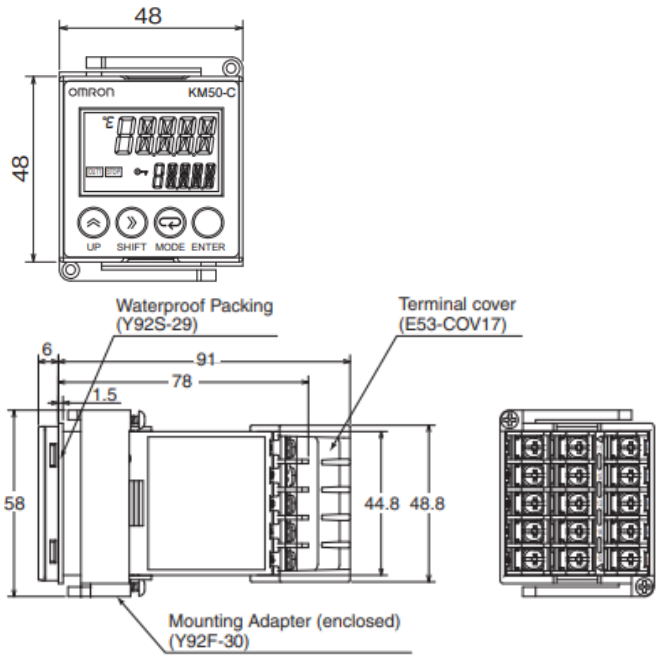
[Dimensions]

Product discontinuation KM1-PMU1A-FLK KM1-PMU2A-FLK KM1-EMU8A-FLK	Recommendable replacement KM-N series KM50 series
	**KM-N2-FLK**  **KM-N3-FLK** 

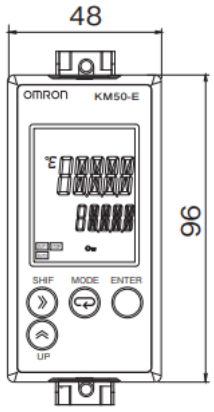
Product discontinuation KM1-PMU1A-FLK KM1-PMU2A-FLK KM1-EMU8A-FLK	Recommendable replacement KM-N series KM50 series

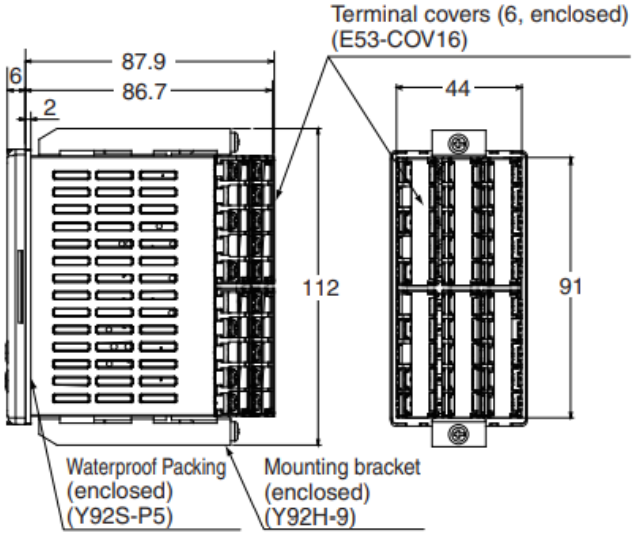


KM50-C1-FLK



KM50-E1-FLK





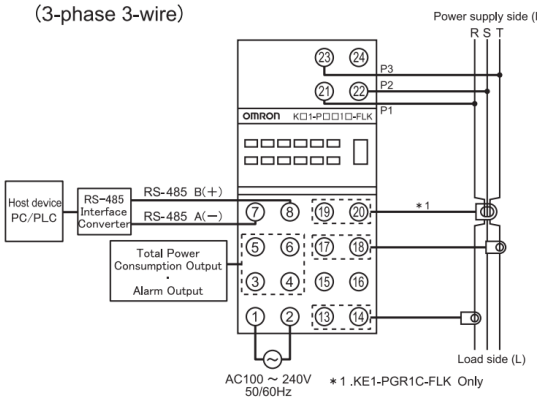
[Wire connection]

Product discontinuation KM1-PMU1A-FLK KM1-PMU2A-FLK KM1-EMU8A-FLK	Recommendable replacement KM-N series KM50 series

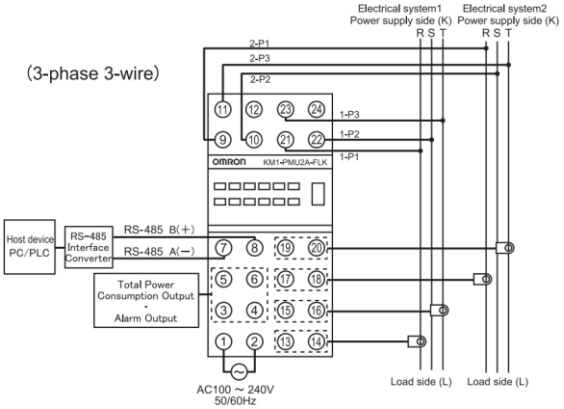
Wire connection

3-phase 3-wire

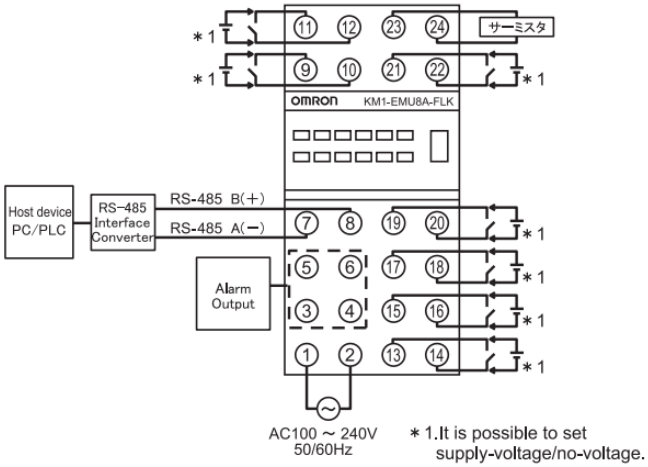
KM1-PMU1A-FLK



KM1-PMU2A-FLK



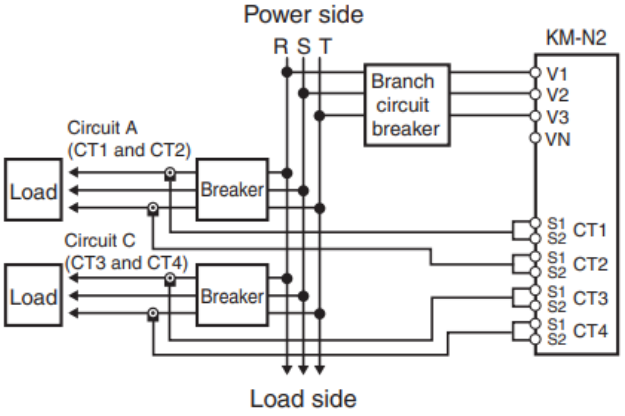
KM1- EMU8A -FLK
Event input: 7
Thermistor inputs: 1



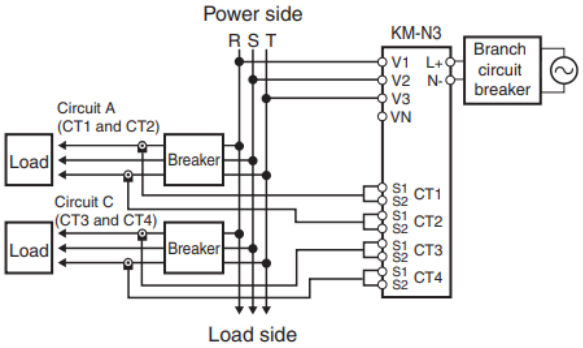
Wire connection

3-phase 3-wire

KM-N2-FLK

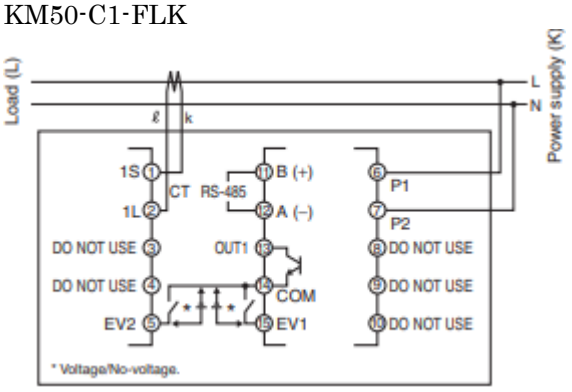


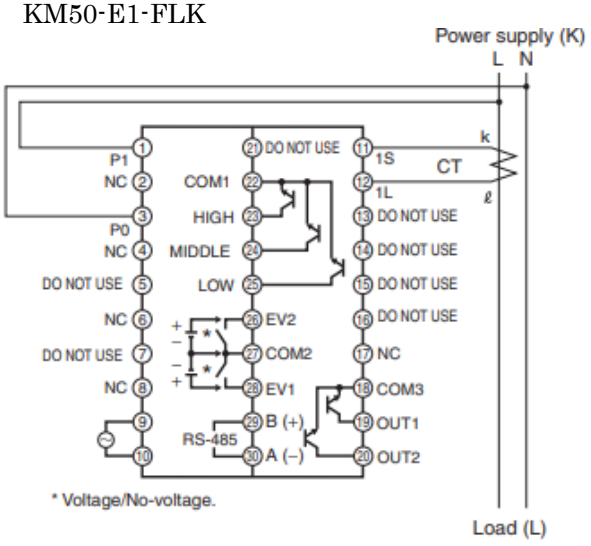
KM-N3-FLK



KM50 series
Event input: 2
Thermistor inputs: None

KM50-C1-FLK



Product discontinuation KM1-PMU1A-FLK KM1-PMU2A-FLK KM1-EMU8A-FLK	Recommendable replacement KM-N series KM50 series
	KM50-E1-FLK 

[Mounting dimensions]

Product discontinuation KM1-PMU1A-FLK KM1-PMU2A-FLK KM1-EMU8A-FLK	Recommendable replacement KM-N series KM50 series
Screw mounting,DIN Track	KM-N2-FLK: DIN Track KM-N3-FLK,KM50 series: Front panel mounting

[Characteristics]

Item			Product discontinuation		Recommendable replacement	
			KM1-PMU1A-FLK	KM1-PMU2A-FLK	KM-N2-FLK	KM-N3-FLK
Applicable phase wiring method			Single-phase two-wire, Single-phase three-wire, Three-phase three-wire, Three-phase four-wire	Single-phase two-wire, Single-phase three-wire, Three-phase three-wire	Single-phase two-wire, Single-phase three-wire, Three-phase three-wire, Three-phase four-wire	
Power supply	Rated power supply voltage		100 to 240 VAC, 50/60 Hz		input voltages	100 to 240 VAC, 50/60 Hz
	Allowable supply voltage range		85% to 110% of rated power supply voltage		85% to 115% of rated power supply voltage	85% to 110% of rated power supply voltage
	Power consumption		Standalone: 10 VA max., Maximum expansion: 14 VA max		7 VA max.	
Input	Rated input voltage	Single-phase two-wire: Line voltage	100 to 480 VAC		100 to 277 VAC	
		Single-phase three-wire: Phase voltage/line voltage	100/200 VAC		100 to 220VAC/ 200 to 440VAC	100 to 240VAC/ 200 to 480VAC
		Three-phase three-wire: Line voltage	100 to 480 VAC		173 to 277VAC	
		Three-phase four-wire	58 to 277 VAC (Phase voltage)	—	Grounded neutral: 100 to 254VAC(Phase voltage) 173 to 440VAC(line voltage)	Grounded neutra: 100 to 277VAC(Phase voltage) 173 to 480V（line voltage）
					Not grounded neutral: 100 to 120VAC(Phase voltage) 173 to 208VAC(line voltage)	
	Rated input current (CT)		5, 50, 100, 200, 400, or 600 A		General-purpose CT with a rated secondary current of 1 A or 5 A	
	Dedicated CT		Model KM20-CTF-☐A Model KM20-CTB-5A/50A (penetration type)		Model KM-NCT-E☐A * CE marking compliant KM-N2/N3 dedicated products	
	Dedicated CT cable		Model KM20-CTF-CB3		-	
	Rated input frequency		50/60 Hz		Same as left	
	Allowable input voltage		110% of rated input voltage (continuous)		115% of rated input voltage (continuous)	
	Allowable input current		120% of rated input current (continuous)		Maximum CT secondary current 6A	
Ambient operating temperature			−10 to 55°C (with no condensation or icing)		−25 to 55°C	
Storage humidity			−25 to 65°C (with no condensation or icing)		−25 to 85°C	
Ambient operating humidity			25% to 85%		Same as left	

Item		Product discontinuation		Recommendable replacement	
		KM1-PMU1A-FLK	KM1-PMU2A-FLK	KM-N2-FLK	KM-N3-FLK
Storage humidity		25% to 85%		Same as left	
Installation environment		Overvoltage category II, pollution degree 2, measurement category II		Same as left	
Compliant standards		EN/IEC 61010-2-030 and EN/IEC 31626-1 Industrial electromagnetic environment		UL61010-1(Recognized) EN61010-2-030 EN61326-1	
Accuracy	**Voltage**	±1.0% FS, ±1 digit; or, ±2.0% FS, ±1 digit for voltage across Vtr under the same conditions		No provision	
	Current	±1.0% FS, ±1 digit However, the accuracy is ±2.0% FS, ±1 digit for the phase-S current for a three-phase, three-wire circuit and the phase-N current for a singlephase, three-wire circuit under the same conditions.		No provision	
	Power	Active power and reactive power ±2.0% FS, ±1 digit (Power factor = 1)		0.5% (IEC 62053-22 class 0.5S)	
	Frequency	±0.3 Hz ±1 digit		No provision	
Low-cut current set value		0.1% to 19.9% of rated input in 0.1% increments		None	
Sampling cycle		100 ms for measurement voltage at 50 Hz and 83.3 ms for measurement voltage at 60 Hz		80 ms for 50 Hz and 66.7 ms for 60 Hz	
Weight		230 g		350g	
Transistor outputs	**Number of outputs**	Three open collectors (OUT1, OUT2, OUT3) and common		Number of outputs: 4 (photoMOS relay outputs) Used for the total power consumption pulse output.	
	Output capacity	30 VDC, 30 mA		50 mA at 40 VDC	
	ON residual voltage	1.2 V max.		1.5 V max.	
	OFF leakage current	100 μA max.		0.1 mA max.	
	Total power consumption pulse output	Outputs one pulse when the power consumption reaches the set pulse output unit (1, 10, 100, 1k, 2k, 5k, 10k, 20k, 50k, 100k W/h).		Output unit: 1, 10, 100, 1k, 5k, 10k, 50k, or 100k (wh)	
	Alarm output	Outputs an alarm based on the set alarm output threshold.		None	
RS-485	**Protocols**	Communications protocol setting: Compoway/F or Modbus		Same as left	
	Baud rate	9,600 bps, 19,200 bps, or 38,400 bps		1.2、2.4、4.8、9.6、19.2、38.4kbps	
	Maximum transmission distance	500 m		1200m	
	Maximum number of nodes	CompoWay/F: 31, Modbus: 99		Modbus: 99, CompoWay/F: 31 If you measure more than one circuit with one Power Monitor, the number of circuits is treated as the number of connected Power Monitors.	

Item	Product discontinuation		Recommendable replacement	
	KM1-PMU1A-FLK	KM1-PMU2A-FLK	KM-N2-FLK	KM-N3-FLK
USB	USB 1.1 compatible		None	

[Characteristics]

Item		Product discontinuation	Recommendable replacement	
		KM1-EMU8A-FLK	KM50-C1-FLK	KM50-E1-FLK
Power supply	**Rated power supply voltage**	100 to 240 VAC, 50/60 Hz	Same as left	
	Allowable supply voltage range	85% to 110% of rated power supply voltage	Same as left	
	Power supply allowable frequency range	45 to 65 Hz	Same as left	
	Power consumption	10 VA max.	7 VA max.	
Ambient operating temperature		−10 to 55°C (with no condensation or icing)	Same as left	
Storage humidity		−25 to 65°C (with no condensation or icing)	Same as left	
Ambient operating humidity		25% to 85%	Same as left	
Storage humidity		25% to 85%	Same as left	
Installation environment		Overvoltage category II, pollution degree 2, measurement category II	Same as left	
Compliant standards		EN/IEC 61010-2-030 and EN/IEC 31626-1 Industrial electromagnetic environment	EN61010-1（IEC61010-1）、EN61326-1（IEC61326-1）、UL61010-1、CAN/CSA-C22.2 No.61010-1	
Event inputs	**Number of inputs**	7	2	
	No-voltage inputs	ON current: 15 mA max., ON residual voltage: 8 V max., OFF leakage current: 1.5 mA max.	ON resistance: 1 kΩ max. OFF resistance: 100 kΩ min. ON residual voltage: 8 V max. ON current (at 0 Ω): 10 mA max.	
	Voltage input	High level: 4.75 to 30 VDC Low level: 0 to 2 VDC Input impedance: Approx. 2 kW	Same as left	
	Minimum input time	5ms	Same as left	
Temperature inputs	**Thermistor inputs**	1	None	
	Applicable thermistor	E52-THE5A Color code (blue): −50 to 50° C Color code (black): 0 to 100° C		

[Functions]

Item		Product discontinuation			Recommendable replacement	
		KM1-PMU1A-FLK	KM1-PMU2A-FLK		KM-N2-FLK	KM-N3-FLK
			Single Power System	Dual Power Systems		
Number of measured circuits	**Single-phase, 2-wire**	4 circuits max.	4 circuits max.	Per 1 system 2 circuits max.	4 circuits max.	
	Single-phase, 3-wire	1 circuits max.	2 circuits max.	Per 1 system 1 circuits max.	2 circuits max.	
	Three-phase, 3-wire	1 circuits max.	2 circuits max.	Per 1 system 1 circuits max.	2 circuits max.	
	Three-phase, 4-wire	1 circuits max.	―	―	1 circuits max.	
Measuring function	**Active power**	○			○	
	Active energy	○			○	
	Current	○			○	
	voltage	○			○	
	Power factor	○			○	
	Reactive power	○			○	
	Frequency	○			○	
	Active energy (export)	○			○	
	Cumulative reactive power	○			○	
Outputs function	**Total power consumption pulse output**	○			○	
Alarm output	**Power**	○			×	
	Overcurrent/Undercurrent	○				
	Over voltage /Under voltage	○				
	Power factor	○				
	Reactive power	○				
	Phase-sequence	○				
Logging		○			×	
Others	**3-STATE function**	○			×	
	Power intensity measurement	○			×	
	Conversion value	○			○	
	Simple measurement	○			×	
	CT ratio setting	○			×	

Item		Product discontinuation			Recommendable replacement	
		KM1-PMU1A-FLK	KM1-PMU2A-FLK		KM-N2-FLK	KM-N3-FLK
			Single Power System	Dual Power Systems		
	VT ratio setting	○			○	
	Low-cut current value function	○			×	
	Average number of times	○			×	

[Functions]

Item	Product discontinuation	Recommendable replacement	
	KM1-EMU8A-FLK	KM50-C1-FLK	KM50-E1-FLK
Pulse input count	○	○	
Pulse ON time	○	○	
Pulse Conversion value	○	×	

Specifications and prices in this product news are as of the issue date and are subject to change without notice.
Only main changes in specifications are described in this document. Please be sure to read the relevant catalogs, datasheets, product specifications, instructions, and manuals for precautions and necessary information when using products.