

Confidential

No. EK- 8027

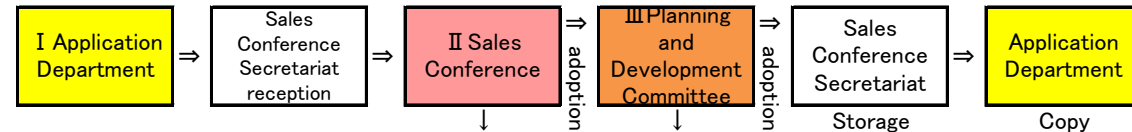
Number of
Revisions 0

Product Proposal

Created date 13-Oct-20					
Sales Conference Secretariat reception		Sales Manager in Japan Global		Drafting department Sales Engineering Section/Office	
Morisaka	Sugiyama	Matsunaga	Nishimiya	Shionoya	Nishimiya

I Application Department	Theme	Suction type 4-component portable detector (successor to GX-2012)				Information Report No. JH- 8027															
	Products Concept	Development of inexpensive suction-type 4-component portable mainly for overseas markets																			
	Development Purpose	A Entering New Markets : _____ B New product sales to existing market : Petrochemicals/Oil and gas/Firefighting, etc. _____ C Substitutional demand through improvement of existing products : GX-2012 _____ D Competing against competitors : GMI PS-200, etc. _____ E Others : _____																			
	Desired shipping start date	Shipments to begin in October 2021																			
	Competitors Information	<table border="1"> <tr> <td>RAE Co</td> <td>Model: Q RAE III</td> <td>Sales Price: 43,050 yen</td> </tr> <tr> <td>GMI Co</td> <td>Model: PS-200</td> <td>Sales Price: 48,300 yen</td> </tr> <tr> <td>Gas Clip Co</td> <td>Model: Gas Clip Pump</td> <td>Sales Price: 53,040 yen</td> </tr> <tr> <td>BW Co</td> <td>Model: BW Max XT II</td> <td>Sales Price: 55,200 yen</td> </tr> <tr> <td>New Cosmos Co</td> <td>Model: XP-302MR</td> <td>Sales Price: 135,000 yen</td> </tr> </table>					RAE Co	Model: Q RAE III	Sales Price: 43,050 yen	GMI Co	Model: PS-200	Sales Price: 48,300 yen	Gas Clip Co	Model: Gas Clip Pump	Sales Price: 53,040 yen	BW Co	Model: BW Max XT II	Sales Price: 55,200 yen	New Cosmos Co	Model: XP-302MR	Sales Price: 135,000 yen
	RAE Co	Model: Q RAE III	Sales Price: 43,050 yen																		
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	BW Co	Model: BW Max XT II	Sales Price: 55,200 yen																		
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Sales Price	Japan	List price 173,000 yen	Partition limit price 69,200 yen	Average Sales Price 103,800 yen	Overseas prices are calculated at the rate of USD=105 yen as of October 19, 2020.																
	Outside Japan	List price 73,500 yen	Partition limit price 29,400 yen	Average Sales Price 32,025 yen																	
Sales Target (Units)	1st year	2nd year	3rd year	4th year	5th year																
	6,500	6500	6500	6,500	6,500																
Remarks																					

Revision Date	Details	Sales Conference	Planning and Development Committee
Month Day, Year		Month Day, Year adoption*rejection	Month Day, Year adoption*rejection
Month Day, Year		Month Day, Year adoption*rejection	Month Day, Year adoption*rejection
Month Day, Year		Month Day, Year adoption*rejection	Month Day, Year adoption*rejection

New Product
Request Form
Flow Diagram

Rejection(Reissue proposal) Rejection(Reissue proposal)

【Requirement specification】

I Application Department	Gas to be detected	<input type="radio"/> : flammable gas <input type="radio"/> : O2 <input type="radio"/> : Others H2S, CO				
	Shape	Portable (If other, provide details in the box below)				
	Detection method	Suction Type (If other, provide details in the box below)				
	Suction flow rate (for suction type)	About 350 ml/min. or more				
	Power	AC V ~ V	DC V ~ V	Dry battery continuous use time : hours or more Rechargeable battery continuous use time : hours or more		
	Operating temperature	About -20 °C ~ About 50 °C				
	Operating humidity range	About 0 %RH ~ 95 %RH				
	Dimensions	About (W) × (H) × (D)mm or less or GX-2012 equivalent or lower				
	Mass	About g or less or GX-2012 equivalent or lower				
	Functions · Performance	• Rechargeable battery only (No dry cell battery specification) • Drop endurance (minimum target 1m, effort target 2m) • Buzzer Volume 90dB/30cm = 100dB/10cm • Communication/charging is USB • Flow rate 350mL/min				
Various standard tests	Explosion proof	• Structure intrinsically safe explosion-proof <input type="radio"/> : Domestic explosion-proof <input type="radio"/> : China Ex <input type="radio"/> : EAC • Explosion grade II C <input type="radio"/> : IECEx <input type="radio"/> : ITRI <input type="radio"/> : CSA/UL • Temperature grade T4 <input type="radio"/> : ATEX <input type="radio"/> : INMETRO <input type="radio"/> : Others				
	Performance	<input type="radio"/> : IEC/EN 60079-29-1 (combustible) <input type="radio"/> : JIS T8206 (combustible) : _____ <input type="radio"/> : EN 50104 (O2) <input type="radio"/> : JIS T8201 (O2) : _____ <input type="radio"/> : EN 45544 (toxicity) <input type="radio"/> : JIS T8205 (H2S) : _____				
	Other standard tests	<input type="radio"/> : IP 66/67 Equivalent : MED <input type="radio"/> : CPA : _____ <input type="radio"/> : CE Marking : JG <input type="radio"/> : Others : _____ <input type="radio"/> : SIL : HART : _____ (See product specification list for details)				
Accessories	None					
Sold separately	Tapered nozzle, hand strap, USB charger, etc.					
Remarks (If there are any special notes on the background of the request, etc., please describe)	GX-2012 Type-A, GT, and dry cell battery specification is supported by the successor to the GX-6000.					

II Sales Conference	The 938 th	III Planning and Development Committee
	Results of Discussion (Date of Discussion: October 19, 2020) (<input type="radio"/> adoption • <input type="radio"/> rejection) Approval of this matter as drafted. Appeal to the Planning and Development Committee Check the contents again for product specification	
	approval 10/20 Kobu	

262-2021-10

Product specification list

Model : GX-2012MK II

Last update : October 15, 2020

<Operational Rules>

- As a general rule, the person in charge of the product in the Sales Engineering Section fills in/compiles the form.
- If you make new entries or make changes to the product specification list, use the "Confirmation Request/Response Sheet" to inform the project.
- Based on the commercialization plan, enter the sales request in black along with the [request entry date].
- Items that are not included in the commercialization plan will be filled in as soon as the sales request is finalized.
- If you have updated it, enter the updated date in [Last update] on the upper right.

【Basis for request】

(If there is a significant change from the previous model or if the basis for the change is clear, such as a standard, a competitor's rivalry, or a customer requirement, etc., describe the change.
(Example) Requirements of IEC60079-29-1

【Request entry date】

Enter date entered
(Example)2020.4.1

【Status】

When it is confirmed, write "confirmed" and the date
(Example)confirmed/2020.4.1

【Change details/Reason】

If you want to change the sales request, enter the details of the change and the reason in [Change details/Reason] along with the date.

		Black: Sales request	Red: Request change *Leave a clear reason for the change				Enter date entered (Example)2020.4.1	When it is confirmed, write “confirmed” and the date (Example)confirmed(2020.4.1)	If you want to change the sales request, enter the details of the change and the reason in [Change details/Reason] along with the date.
Model									
Shape (Portable/Stationary/Other)			Portable				—	2020.10.15	
Sensor	Detection target gas		HC or CH4	O2	CO	H2S	—	2020.10.15	
	Detection principle		Contact combustion type	Constant potential electrolysis type			—	2020.10.15	
	Sensor shape		R sensor				—	2020.10.15	
	Detection range		0–100%LEL	0–40.0vol%	0–2000ppm	0–200.0ppm	Flammable vol range not supported due to cost reduction	2020.10.15	
	1 digit		1%LEL	0.1vol%	1ppm	0.1ppm	—	2020.10.15	
	Indication accuracy								
	Response time								
Gas Alarm	Alarm setpoint								
	Kinds		3–stage alarm (can be set as desired on the main unit)				—	2020.10.15	
	Operation		Buzzer／LED／Vibration／Screen Display				—	2020.10.15	
	Recovery action		Self–holding				—	2020.10.15	
Fault Alarm	Kinds		System error / Sensor error / Low battery voltage / Poor calibration / Low flow rate				—	2020.10.15	
	Operation		Buzzer／LED／Vibration／Screen Display				—	2020.10.15	
	Recovery action		Self–holding				—	2020.10.15	
Software	Display		LCD digital (7 segments + symbols)				—	2020.10.15	
	Function		Combustible gas conversion, data logger, snapshot, peak display				—	2020.10.15	
	Communication		USB(log data output, for configuration software)				—	2020.10.15	
	Data logger								
Case	Detection method		Pump suction type				—	2020.10.15	
	Suction flow		350ml/min				Inferior to the current one, but priority is given to cost reduction	2020.10.15	
	Buzzer volume		90dB/30cm = 100dB/10cm or more (Hope a sound that is easy to hear)				Inferior to the current one, but priority is given to cost reduction	2020.10.15	
	Operating temperature range		–20 – +50°C (=GX–2012/competitors)equal or better				—	2020.10.15	
	Operating humidity range		0 – 95%RH (=GX–2012)equal or better				—	2020.10.15	
	External dimensions (W × H × D)		About 71 × 173 × 43mm (GX–2012) equal to or less than				—	2020.10.15	
	Mass		About 360g(=GX–2012)equal to or less than				—	2020.10.15	
	Drop Endurance		3m or more				Equivalent to PS200 With protection cover, etc. is acceptable.	2020.10.15	
	Protection grade		Equivalent to IP66/67				competing with the competition (BW Max XT II /Ventis MX4)	2020.10.15	
Power	Power		lithium–ion rechargeable battery				Charge–only for cost reduction	2020.10.15	
	Continuous use time		約10 hours (GX–2012)equal or better				—	2020.10.15	
Standard Test	Explosion proof	Structure/Grade	Intrinsically safe explosion–proof structure/Ex da ia II CT4				—	2020.10.15	
		Kinds	ATEX/IECEx, Domestic explosion proof, CCA/UL (North America), China Ex, ITRI (Taiwan), INMETRO (Brazil), EAC (Russia and others), KCs (South Korea), PESO/DGMS (India)				It is planned to decide whether each test is acquired at RIKEN or at a store.	2020.10.15	
	Performance		IEC/EN 60079–29–1 (combustible), IEC/EN 50104 (O2), JIS T8205 (combustible), JIS T8201 (O2), JIS T8205 (H2S)				—	2020.10.15	
	SIL	Equipment positioning							
		Target Specifications							
		Compliant Standards							
		Functional Safety Level							
		Operation Mode							
		Specific specifications for functional safety							
Other		CE Marking, CPA (China), Russian Measurement Equipment Certification				It is planned to decide whether each test is acquired at RIKEN or at a store.	2020.10.15		
Guarantee	Sensor		3 years				—	2020.10.15	
	Body		3 years (Excluding consumables)				—	2020.10.15	
Accessories			None				All special accessories for cost reduction	2020.10.15	
Options (sold separately)			Taper nozzle, belt clip, hand strap, battery charger, Others are the same as GX–2012, SDM				—	2020.10.15	
External application linkage			None				Not supported due to cost reduction	2020.10.15	
Other			None				—	2020.10.15	