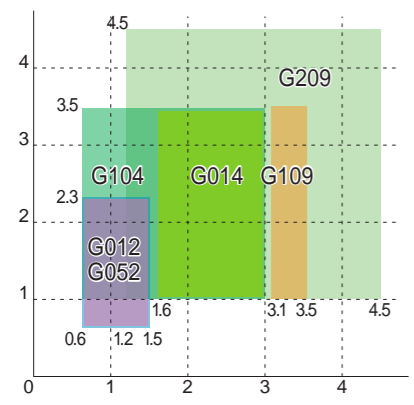


Color

	Oyster white Motor box : CGCC Side frame : aluminum
	Stainless HL Motor box only
	Aluminium Side frame in case of stainless specification

Production range



Product Specification

		G012	G052	G014	G104	G109	G209
Production range	W	W600~1500	W600~1500	W1600~3000	W600~3000	W3100~3500	W1200~4500
	H	H600~2300	H600~2300	H1000~3500	H1000~3500	H1000~3500	H1000~4500
Size	Motor box	D180×H240	D180×H190	D230×H280	D230×H230	D300×H300	D300×H300
	Side frame	W50×D53		W70×D70			
Motor	Input power	single phase AC200V~230V ±10%					
	Output	0.2kW			0.4kW		0.95kW
	Operation speed (default)	open: 2.0m/s (Max 2.6m/s) close: 0.7m/s (Max 1.5m/s)			open: 2.0m/s (Max 3.0m/s) close: 0.7m/s (Max 1.5m/s)		open: 1.5m/s (Max 1.5m/s) close: 0.7m/s (Max 1.5m/s)
	Reduction ratio	1/10		1/14		1/10	1/23
Reduction type (Method)		YUSEI HASUBA gear reduction system					
Controller	Concealed into shutter box	●	—	●	—	—	—
	Concealed into side frame	—	—	—	●(right frame)	●(right frame)	●(right frame)
	Separate type	W600	●	—	—	—	—
Frequency in use		up to 100 times / hour					
Drum		aluminium					

- ※1 Ambient temperature -10deg-C to 40deg-C. Humidity Less than 85%. (No frozen, and condensation)
- ※2 Please install the place where is no direct rain fall.
- ※3 Please refrain from using at the place of, sea side, and environments with steel powder, chemical, Acid or other corrosive ambient, Condensation, Frozen, and poison gas.
- ※4 Clear size is to be unit by 100mm.
- ※5 Please consult with us, if size is out of our standard size. In any case, we can not manufacture according to dimension requested.
- ※6 External appearance and specification of the product might be changed without a previous notice for the quality improvement.
- ※7 Please read, and understand our instruction manual well, when you are operating. In case happy gate monban is not operated long time, please keep open shutter fully. In abnormal wind etc, sheet will come off, and injure people.
- ※8 In case overlapping clear size by different models, please refer to wind withstand data for your selection.

Dismantle, Abandonment, Recycle

When dismantle MONBAN, please proceed according to our installation manual. If you have any question, please do not hesitate to contact us.

小松電機産業株式会社 <http://www.komatsuelec.co.jp>
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Awards
Science and Technology Agency 1995.4
Notable invention selection prize of Science and Technology Agency
Medium and Small Business Research Institute Corporation 1991.1
Medium and Small Business Research Institute Prize
Nikkei Inc 1993.1
Prize of Contributor to Regional Society
The New Business Conference 1991.10
New Business Grand Prize
The Ministry of Land, Infrastructure and Transport 2007.10
Commendation by the Minister of Land, Infrastructure and Transport

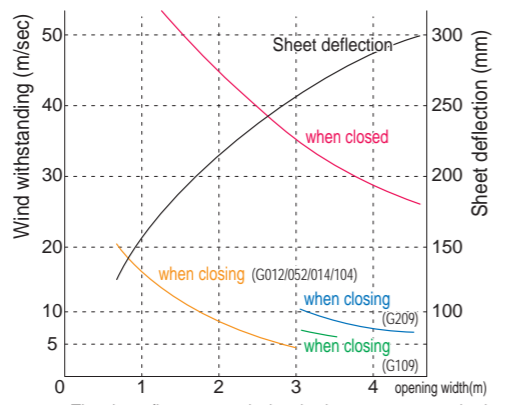
External appearance and specification of the product might be changed without a previous notice for the quality improvement. The content of the description of this catalog is as of March, 2012. The tone of the catalog might be seem to differ from what actually is according to the print. 1203-01 Reprint without permission is forbidden.

Variation of sheet

Standard sheet		Functional sheet	
	Blue Certification of flameproof F-22095 opacity		Clear Certification of flameproof F-07048 semitransparent
	Orange Certification of flameproof F-22095 opacity		Orange Certification of flameproof F-07048 semitransparent
	Light-shielding : silver Fire-proof authorization F-57022		Ventilation : mesh Fire-proof authorization F-18050
	Nonflammable : ivory Nonflammable authorized-number NM-0414		Nonflammable and lighting : white Nonflammable authorized-number NM-2273
	Nonflammable : optron Fire-proof authorization F-07048		Nonflammable and lighting : clear Nonflammable authorized-number NM-3043

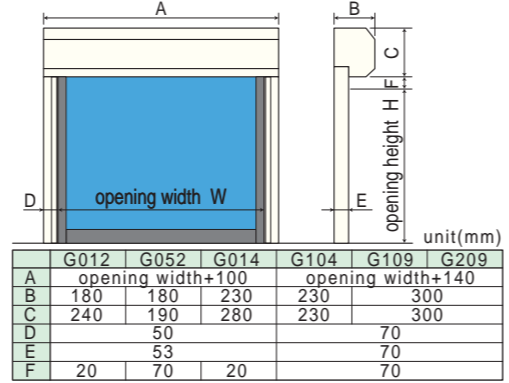
※Colour of picture image is having difference from actual products. External appearance and specification of the product might be changed without a previous notice for the quality improvement.
※Registration company number for flame-proof is F-0793.
※Optron is under registration ob Ikari, and Taisei E&L

Wind withstanding



※The above figures are calculated value, not guaranteed value.

Drawing



Please be sure to install photocell sensor for safety. Please check, and make sure place and position of photocell sensor according to subject passing through happy gate monban.



happy gate monban



高速開閉で熱損失が少ない
エコマーク認定番号: 第10 123 019号
使用契約者名: 小松電機産業株式会社



happy gate monban introduction movie

New series of MONBAN can be integrated with various equipment like 'air-shower' or 'air-curtain'.



MONBAN integrated with air-curtain

Safety reversal in case of contact

Sheet rising and self-repairing

Easy escape in case of emergency

Compact design with no projection
MONBAN integrated with air-shower

小松電機産業株式会社
KOMATSU ELECTRIC INDUSTRY CO.,LTD.

Patent Pending

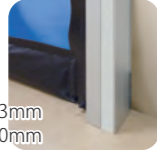
Joy will spread and Happiness will be born with happy gate monban

G012/052/014

Controller built-in motor box
G052: controller separated

1 Compact design

40% slimmer than conventional type Suitable for doorway of factory and office



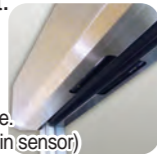
G012/052/014 W50mm×D53mm
G104/109/209 W70mm×D70mm



G012 H240mm×D180mm
G052 H190mm×D180mm
G014 H280mm×D230mm

2 Starting sensor built-in motor box

No buildup of dust can support your clean environment.



Sensor on the back of motor box is built-in type. (with cover for building-in sensor)



※G012/014 only

3 Controller built-in motor box

No need of space for installing controller

※G052: controller separated



※G012/014 only



G104/109/209

Controller built-in side frame

4



4 Controller built-in side frame

Controller built-in side frame can support space-saving and easy maintenance.

※G104/109/209

5



5 Operation panel for setting function

Position setting and various operation settings facilitate by flat operation panel built-in side frame.

(opening and closing operation, upper and lower position setting, function setting, error display, operation mode switch, etc.)

※ all type

※ G012/052 is different in external appearances.

6



6 LED signal display built-in side frame (Option)

With voice guide

Coming soon

Alarm display with voice and red/green LED
Multilingual 12 languages / voice setting guide

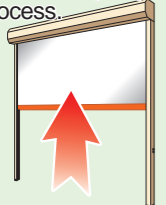
High-speed • Energy-saving • Clean

Fastest in Japan
Opening speed

3.0m/s

(G109)

happy gate monban supports energy-saving and higher quality of your products by minimizing open time, keeping inside temperature, and keeping insects and dust away, and contributes to your higher efficiency of your working process.



Energy saving

60%

Reduction compared to conventional type

More energy-saving by ECO mode and high-speed operation

ECO mode (MONBAN original)



Half open for person

Full open for vehicles

ECO-mode is the energy-saving operation mode that is opening and closing things. Efficient opening and closing are achieved by shortening opening time.

High airtightness

Positive pressure Negative pressure

3.58 4.17

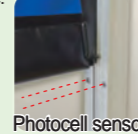
(unit : m³/h · m²)

Airtight structure of high insect control and dustproof is complied with various types of clean environments.

Flat surface by built-in switch / sensor makes no collection of dust.

Concealed operation switch is clean, and no collection of dust.

※ 1 or 3 point switch is also available.



Photocell sensor

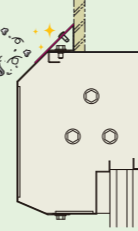


Non-contact switch

Cover for prevention of dust

Preventing from buildup of dust at top of shutter box, where is difficult to clean by daily maintenance.

※ Available two type (S, and L2)



Separate type controller is suitable for refrigeration, and cold room.

Separate type controller has heater for application of refrigeration, and cold room.



Safety

Reverse control by three-speed



High speed 3.0m/sec
(fastest of G109)
Normal operation by starting sensor or switch

Medium speed 1.5m/sec
In case of detection of photocell sensor

Low speed 0.5m/sec
In case of contact during operation

Backup power for the event of power failure

Coming soon

Backup power can support operation in case of power failure. (Option)

※ Operation time and operation number of times are different by types or sizes.

Easy escape in case of emergency



Lightweight structure makes possible escape in case of emergency only by releasing and lifting up bottom of sheet.

Easy replacement of side frame



Separated side frame can save your maintenance cost, lift hit side frame.

Self-repairing system



Sheet can be re-set by one time full open operation.



Self-repairing system

※ Picture image is different from actual products. It is taken after colouring fastener by white for easy