

The Series Z escalator is equipped with various safety devices that provide for safety and reliability.

For EN115 Code

•···Standard O···Optional



Max rise (mm): 7000 (30°), 6000 (35°)

•···Standard O····Optional N/A····Not applicable

Emergency Stop Button (E-STOP)
A button to immediately stop the escalator in emergency situations.
\bigcirc Step Motion Safety Device (CRS)
A safety device to stop the escalator when a Step has been dislocated on its riser side due to an object caught between the Steps, or between the Skirt Guard and the Step, or if an abnormality has been observed in the Step motion.
Overload Detection Device
A safety device that stops the escalator if overload has been detected by abnormal current or temperature of the drive motor.
Drive Chain Safety Device (DCS)
A safety device that stops the escalator if the Drive Chain breaks or stretches beyond an allowable limit.
Speed Governor (GOV)
 A safety device that stops the escalator if the speed significantly decreases or increases to 120% of the rated speed.
 Electromagnetic Brake

○ Handrail Speed Safety Device (HSS)

A safety device that stops the escalator if the Moving Handrails fail to synchronize with the Steps due to slippage, loosening or breakage of the Moving Handrails.

Step Level Device (SRS)

A safety device that stops the escalator if the horizontal level of a Step has dropped.

○ Skirt Guard Safety Device (SSS)

A safety device to stop the escalator if a shoe or other item becomes trapped in the gap between the Step and Skirt Guard.

• Comb-Step Safety Switch (CSS)

A safety device that stops the escalator if a foreign object becomes trapped in the gap between the Step and Comb.

Handrail Guard Safety Device (HGS)

1) Inlet Guard

A guard made of soft rubber, which fits over the outside of the Moving Handrail where it enters the Balustrade to keep fingers, hands or foreign objects away from the Moving Handrail opening.

Inlet Guard Switch
 A safety device that stops escalator when physical contact is made with the inlet.

Step Chain Safety Device (SCS)

A safety device that stops the escalator if the Step Chain breaks or stretches beyond an allowable limit.



A safety device that stops the escalator in the case of power failure, or if any safety device or the Emergency Stop Button has been activated.

A safety device that stops the escalator if the speed

O Auxiliary brake*

Division		Specification	ZS	ZL*1	ZP
	AC1				
Control	Inverter (VVVF)			0	*2
Control	Automatic Operati	on with Posts (Stationary in stand-by, AC1)		\bigcirc	
system	Automatic Operati	on with Posts (Slow operation in stand-by, Inverter)		0	
	Post-Free Automa	tic Operation (Slow operation in stand-by, Inverter)		\bigcirc	
	Stop-Buzzer Key S	Switch			
	Anti-Slip Floor Pla	te			
	Step with Anti-Slip	Grooves			
	Demarcation Line				
	Stepped Demarca	tion Line			
Safety	Step Demarcation	Lighting		\bigcirc	
features	Comb Light			\bigcirc	
	Three Horizontal S	Steps		0/0	*3
	Warning System of	n Moving Handrail Inlet (Inlet Sensor)		O*4	4
	Warning System of	n Outer Deck (Outer Deck Sensor)	C)*4	N/A
	Directional Indicato	r on Handrail Inlet Cap (Handrail Inlet Cap LED Indicator)		O*4	1 *5
	Directional Indicate	or at Comb level (Comb-Side LED Indicator)		*4	1*6
	Balustrade	Transparent tempered glass panel			N/A
	See page 12 for	Under-Handrail Lighting	N/A		N/A
	sections.	Stainless steel hairline panel	N/	A	
	Skirt Guard	Fluoropolymer Coating			
		Skirt Guard Lighting	O*1	N/A	O*1
	Deck Board	Stainless steel hairline			
	Step	Aluminum alloy Step Tread			
Finish and		Aluminum alloy Cleat Riser			
decorative		Yellow Demarcation Line			
components	Floor Plate	Decorative Panel (Embossed stainless steel)			
		Floor Numbers		0	
		Comb			
		Extension of Floor Plate		0	
		Connection of adjacent Floor Plates		0	
	Moving Handrail	Rubber See page 5 for colors.			
	Handrail Inlet Cap	Resin			
0.1	MelEye			0	
Others	Automatic oiler			Õ	

I: Not applicable to semi-outdoor and outdoor use

*2: Please contact your local Mitsubishi Electric sales agent for VVVF control.

*3: A standard feature for rises exceeding 6000mm or rated speeds exceeding 0.5m/sec.
*4: Not applicable to outdoor use.

*5: Installed only on the right-side Handrail Inlet Cap (when viewed from the boarding and landing areas).

Combination with a Comb-Side LED Indicator is not applicable.

*6: Combination with a Comb Light is not applicable.





For VVVF control, TJ may increase from that shown. Please contact your local Mitsubishi Electric sales agent for details.

Standard dimensions

Reaction force on beam (N)

	10010					_			
Туре			S600	S800	S1000			Without intermediate support beam	With intermediate support beam
W1 (Escalator Wi	idth)		1150	1350	1550			4220 · (-TK+X1)+12000 · (T -X2)	4220·(TK-X1)
W2 (Between Mo	ving Handra	uils)	840	1040	1240		RA	$\alpha \cdot LL + \frac{4220}{LL}$	$\alpha \cdot LA + 4220 - LA$
W3 (Between Ski	rt Panels)		610	810	1010			4220. (TK X1): 12000. (LL T L X2)	12000 (T L X2)
							RB	$\alpha \cdot LL + 4220 \cdot (11 \cdot -1) + 12000 \cdot (LL - 13 + 12)$	$\alpha \cdot LB + 12000 - \frac{12000(13 \cdot K2)}{12000(13 \cdot K2)}$
Horizontal Steps	LF	UF	=	NK	NJ				LB
2 Steps	850	110	00 1	550	1835		PC		a · 11 + 4220 · (TK-X1) + 12000 · (TJ-X2)
3 Steps	1440	172	25 1	975	2260		RC		LA LB

Reaction force factors

		α (N/mm)			
Туре	TG	Environment			
		Indoor Semi-outdoor	Outdoor		
	TG≤13500	5.25			
S1000	13500 <tg≤15000< td=""><td>5.32</td><td>5.25</td></tg≤15000<>	5.32	5.25		
	15000 <tg< td=""><td>5.25</td><td></td></tg<>	5.25			
	TG≤13850	4.56			
S800	13850 <tg≤15500< td=""><td>4.62</td><td></td></tg≤15500<>	4.62			
	15500 <tg< td=""><td>4.56</td><td></td></tg<>	4.56			
	TG≤14200	3.87			
S600	14200 <tg≤16000< td=""><td>3.93</td><td>3.87</td></tg≤16000<>	3.93	3.87		
	16000 <tg< td=""><td>3.87</td><td></td></tg<>	3.87			

	2 Steps								
	Туре	TJ HE≦6000	ΤK	\rightarrow	<1	x	2		
r	S1000	0.405							
	S800	2465	2180	10)31	13	05		
	S600	3015							
	3 Steps								
	Type	T	J						
	1,900	HE≤6000	6000<	HE	T	K	Х	.1	X2
_	S1000	2000	344	0					
	S800	2690	344	0	26	05	14	56	1730
	S600	34	40						



For VVVF control, TJ may increase from that shown. Please contact your local Mitsubishi Electric sales agent for details.

Standard dimensions

Tuno			88	:00	S80(h	S1000
туре	_		00	00	0000	J	31000
W1 (Escalator W	11	1150 135)	1550		
W2 (Between Mo	84	40 1040)	1240		
W3 (Between Ski	6′	10 810			1010		
Horizontal Steps	rizontal Steps LF UF			1	١K		NJ
2 Steps	1095	5	1	630		1900	

Desetion	6		h	(NI)	
Reaction	lorce	OU	peam	(\mathbf{N})	

	Without intermediate support beam	With intermediate support beam
RA	α·LL+ <u>4220·(LL-TK+1111)+12000·(TJ-1370)</u> LL	α·LA+4220- <u>4220·(TK-1111)</u> LA
RB	α·LL+ <u>4220·(TK-1111)+12000·(LL-TJ+1370)</u> LL	α·LB+1200012000·(TJ-1370) LB
RC		$\alpha \cdot LL + \frac{4220 \cdot (TK-1111)}{LA} + \frac{12000 \cdot (TJ-1370)}{LB}$

■Reaction force factors

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	15000 <tg< td=""><td>5.25</td><td></td></tg<>	5.25			
	TG ≦13600	4.56			
S800	13600 <tg td="" ≤15250<=""><td>4.62</td><td colspan="2">1 —</td></tg>	4.62	1 —		
	15250 <tg< td=""><td>4.56</td><td></td></tg<>	4.56			
	TG ≦14200	3.87			
S600	14200 <tg td="" ≤16000<=""><td>3.93</td><td>3.87</td></tg>	3.93	3.87		
	16000 <tg< td=""><td>3.87</td><td></td></tg<>	3.87			

