



**BRAKING COMPONENT
INSTALLATION AND DIMENSIONS**

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INSTALLATION

GENERAL INSTALLATION GUIDELINES

Improper installation of the dynamic brake unit will greatly reduce its life. Be sure to observe the following precautions when selecting a mounting location.



WARNING: FAILURE TO OBSERVE THESE PRECAUTIONS MAY DAMAGE THE UNIT AND VOID THE WARRANTY!

- Do not mount the dynamic brake unit near heat-radiating elements or in direct sunlight.
- Do not install the dynamic brake unit in a place subjected to high temperatures, high humidity, excessive vibration, corrosive gasses or liquids, or airborne dust or metallic particles.
- Mount the dynamic brake unit vertically and do not restrict the air flow to the heat sink fins.



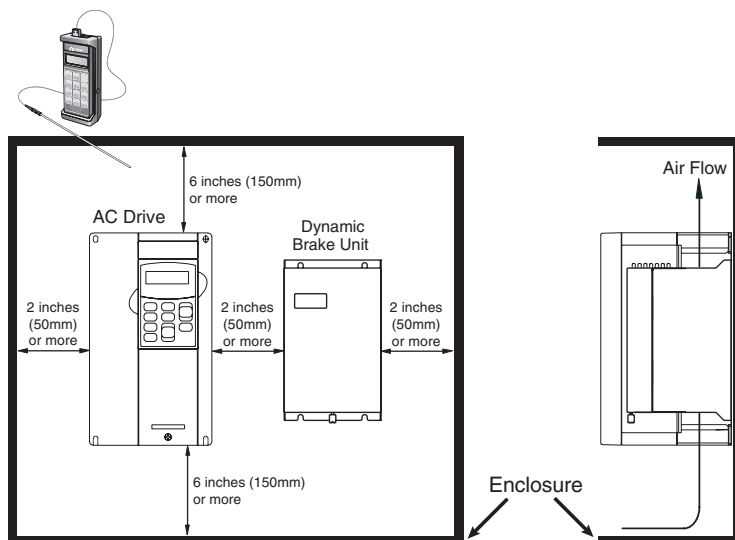
WARNING: THE DYNAMIC BRAKE UNIT AND BRAKING RESISTORS GENERATE LARGE AMOUNTS OF HEAT WHICH MAY DAMAGE THE BRAKING UNIT, RESISTORS, OR ANY EQUIPMENT MOUNTED IN THE SAME ENCLOSURE AS THE HEAT PRODUCING DEVICES. AUXILIARY COOLING METHODS ARE TYPICALLY REQUIRED SO AS NOT TO EXCEED MAXIMUM AMBIENT TEMPERATURES, ESPECIALLY IF FREQUENT DECELERATION BRAKING IS PERFORMED (OVER 10% DUTY CYCLE).



WARNING: FLAMMABLE SOLIDS, GASES, OR LIQUIDS MUST BE AVOIDED AT LOCATIONS WHERE BRAKING RESISTORS ARE INSTALLED. IDEALLY, BRAKING RESISTORS SHOULD BE INSTALLED IN INDIVIDUAL METALLIC BOXES WITH FORCED AIR-COOLING.

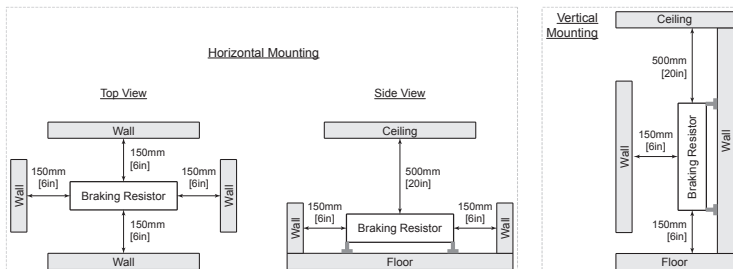
MINIMUM CLEARANCES AND AIR FLOW

Minimum Clearances for Drives and Dynamic Braking Units

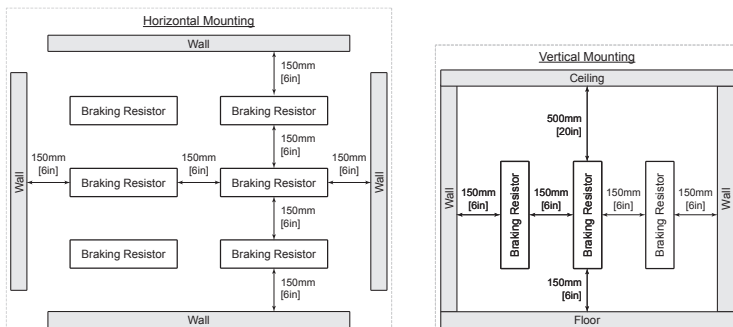


Minimum Clearances for Braking Resistors

Mounting Individual Resistors

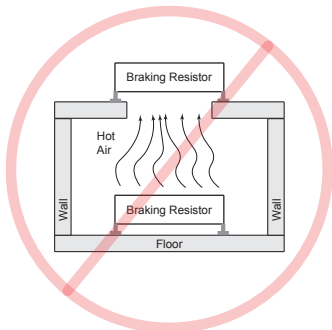


Mounting Multiple Resistors

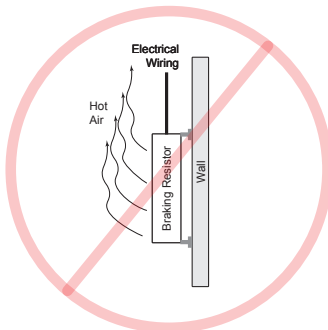


Do NOT Mount Heat-Producing or Heat-Sensitive Items Above Braking Resistors

Do NOT mount one resistor above another one!

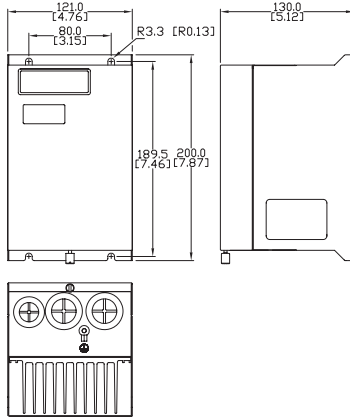


Do NOT run electrical wiring above a resistor!

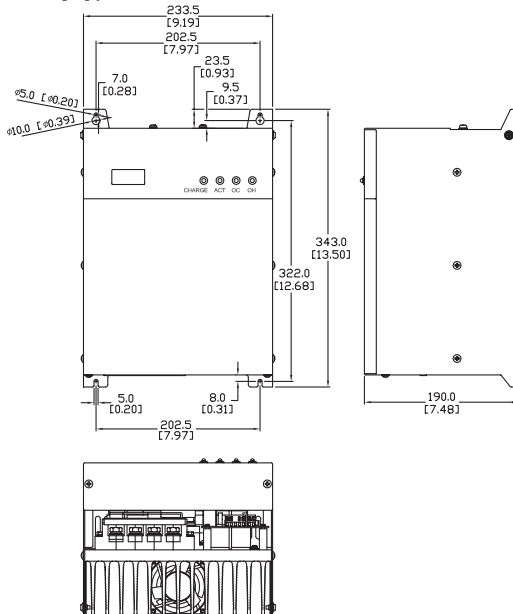


BRAKING UNIT DIMENSIONS

A) DBU ≤ 100hp (GS-1DBU, GS-2DBU, GS-3DBU, GS-4DBU)
 (Dimensions = mm [in])



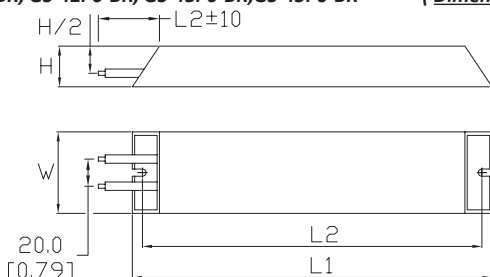
B) DBU > 100hp (GS-5DBU, GS-6DBU, GS-7DBU)
 (Dimensions = mm [in])



BRAKING RESISTOR DIMENSIONS

BRAKING RESISTOR DIMENSION DRAWING INDEX							
RESISTOR	#	RESISTOR	#	RESISTOR	#	RESISTOR	#
GS-20P5-BR	1	GS-41P0-BR	1	GS-BR-080W200	10	GS-BR-1K0W4P3	11
GS-21P0-BR	1	GS-42P0-BR	1	GS-BR-080W750	10	GS-BR-1K0W5P1	11
GS-22P0-BR	1	GS-43P0-BR	1	GS-BR-200W091	10	GS-BR-1K0W016	11
GS-23P0-BR	1	GS-45P0-BR	1	GS-BR-200W360	10	GS-BR-1K0W020	11
GS-25P0-BR	1	GS-47P5-BR	2	GS-BR-300W070	10	GS-BR-1K0W075	11
GS-27P5-BR	2	GS-4010-BR	3	GS-BR-300W250	10	GS-BR-1K2W3P9	11
GS-2010-BR-ENC	4	GS-4015-BR-ENC	4	GS-BR-300W400	10	GS-BR-1K2W015	11
GS-2015-BR-ENC	5	GS-4020-BR-ENC	7	GS-BR-400W040	10	GS-BR-1K5W3P3	11
GS-2020-BR-ENC	5	GS-4025-BR-ENC	8	GS-BR-400W150	10	GS-BR-1K5W012	11
GS-2025-BR-ENC	6	GS-4030-BR-ENC	8	GS-BR-500W100	2	GS-BR-1K5W013	11
GS-2030-BR-ENC	6	GS-4040-BR-ENC	8	GS-BR-750W140	12	GS-BR-1K5W043	11
GS-2040-BR-ENC	5	GS-4050-BR-ENC	9				
GS-2050-BR-ENC	6	GS-4060-BR-ENC	9				
		GS-4075-BR-ENC	8				
		GS-4100-BR-ENC	9				

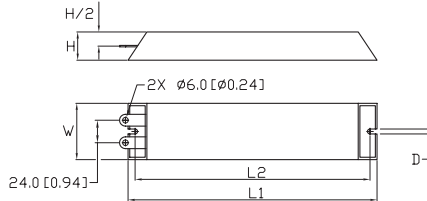
#1) GS-20P5-BR, GS-21P0-BR, GS-22P0-BR, GS-23P0-BR, GS-25P0-BR, GS-41P0-BR, GS-42P0-BR, GS-43P0-BR, GS-45P0-BR (Dimensions = mm [in])



RESISTOR #	L1	L2	H	D	W
GS-20P5-BR	140 [5.51]	125 [4.92]	20 [0.79]	5.3 [0.21]	40 [1.57]
GS-21P0-BR	215 [8.46]	200 [7.87]	30 [1.18]		60 [2.36]
GS-23P0-BR					60 [2.36]
GS-25P0-BR	265 [10.43]	250 [9.84]	20 [0.79]		40 [1.57]
GS-41P0-BR	215 [8.46]	200 [7.87]	30 [1.18]		60 [2.36]
GS-43P0-BR					60 [2.36]
GS-45P0-BR	265 [10.43]	250 [9.84]			

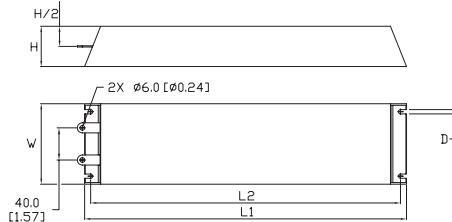
Braking Resistor Dimensions (continued)

#2) GS-27P5-BR, GS-47P5-BR (Dimensions = mm [in])



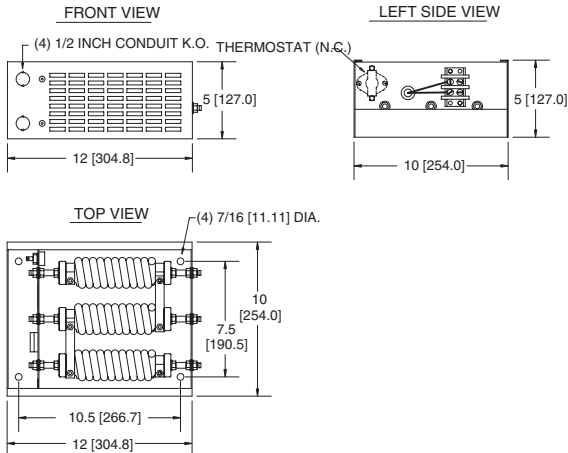
GS-27P5-BR GS-47P5-BR GS-BR-500W100	L1	L2	H	D	W
	335 [13.19]	320 [12.60]	30 [1.18]	5.3 [0.21]	60 [2.36]

#3) GS-4010-BR (Dimensions = mm [in])



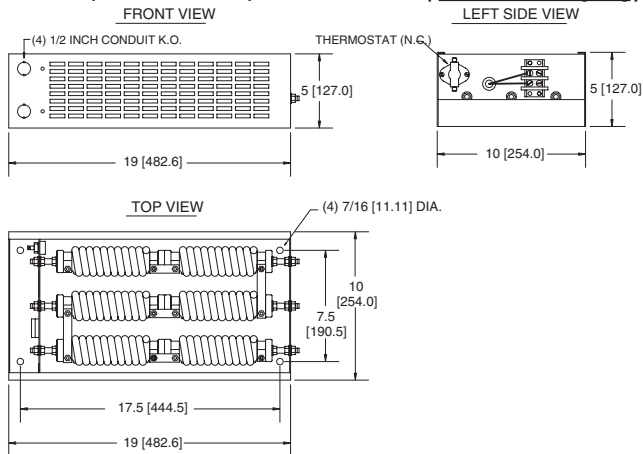
GS-4010-BR	L1	L2	H	D	W
	400 [15.75]	385 [15.16]	50 [1.97]	5.3 [0.21]	100 [3.94]

#4) GS-2010-BR-ENC, GS-4015-BR-ENC (Dimensions = in [mm])

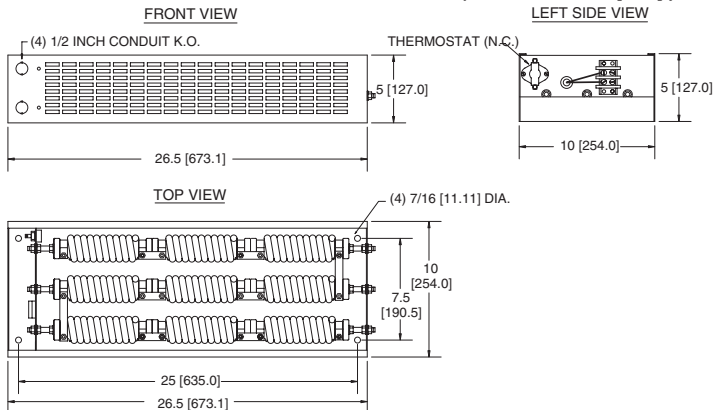


Braking Resistor Dimensions (continued)

#5) GS-2015-BR-ENC, GS-2020-BR-ENC, GS-2040-BR-ENC (Dimensions = in [mm])

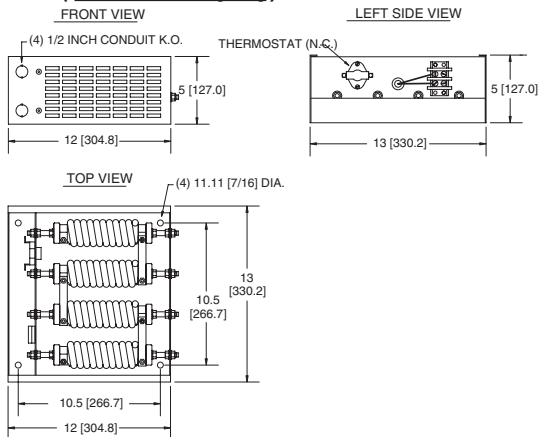


#6) GS-2025-BR-ENC, GS-2030-BR-ENC, GS-2050-BR-ENC (Dimensions = in [mm])

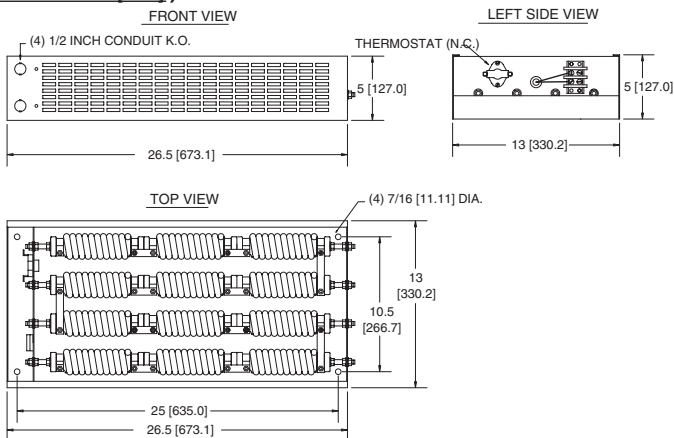


Braking Resistor Dimensions (continued)

#7) GS-4020-BR-ENC (Dimensions = in [mm])

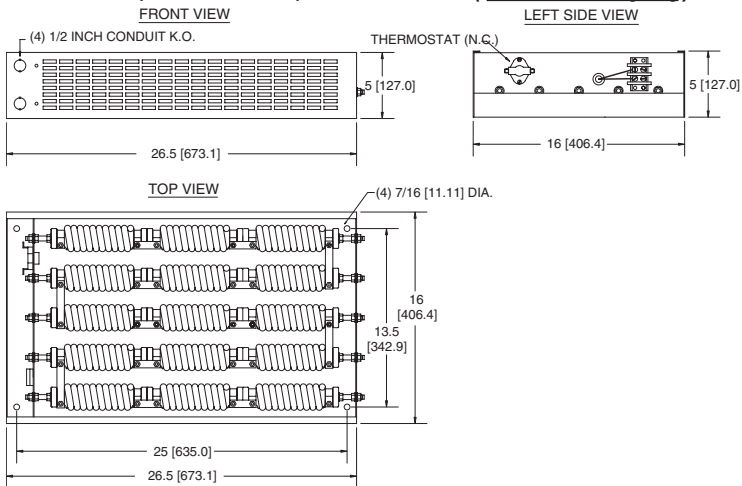


#8) GS-4025-BR-ENC, GS-4030-BR-ENC, GS-4040-BR-ENC, GS-4075-BR-ENC (Dimensions = in [mm])

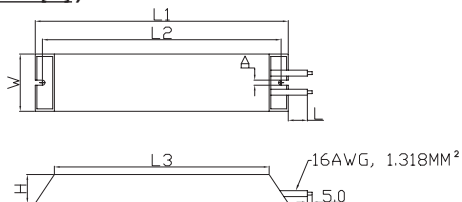


Braking Resistor Dimensions (continued)

#9) GS-4050-BR-ENC, GS-4060-BR-ENC, GS-4100-BR-ENC (Dimensions = in [mm])



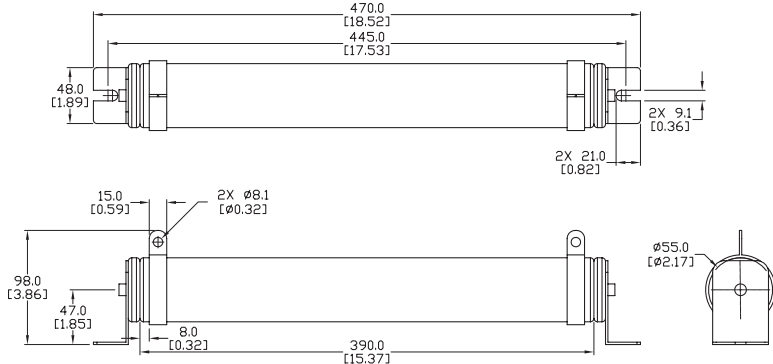
#10) GS-BR-080W200, GS-BR-080W750, GS-BR-200W091, GS-BR-200W360, GS-BR-300W070, GS-BR-300W250, GS-BR-400W040, GS-BR-400W150 (Dimensions = mm [in])



RESISTOR #	L1	L2	L3	W	H	A	L
GS-BR-080W200	140	125	100	40.0	20.0	5.3 [0.21]	200 [7.87]
GS-BR-080W750	[5.51]	[4.92]	[3.94]	[1.57]	[0.79]		
GS-BR-200W091	165	150	125	60.0	30.0	5.3 [0.21]	200 [7.87]
GS-BR-200W360	[6.50]	[5.91]	[4.92]				
GS-BR-300W070	215	200	175	60.0	30.0	5.3 [0.21]	200 [7.87]
GS-BR-300W250	[8.46]	[7.87]	[6.89]				
GS-BR-300W400	215	200	175	60.0	30.0	5.3 [0.21]	200 [7.87]
GS-BR-400W040	[8.46]	[7.87]	[6.89]				
GS-BR-400W040	265.34	250	225	60.0	30.0	5.3 [0.21]	200 [7.87]
GS-BR-400W150	[10.43]	[9.84]	[8.86]				

Braking Resistor Dimensions (continued)

- #11) GS-BR-1K0W4P3, GS-BR-1K0W5P1, GS-BR-1K0W016, GS-BR-1K0W020, GS-BR-1K0W075, GS-BR-1K2W3P9, GS-BR-1K2W015, GS-BR-1K5W3P3, GS-BR-1K5W012, GS-BR-1K5W013, GS-BR-1K5W043** (Dimensions = mm [in])



- #12) GS-BR-750W140**

(Dimensions = mm [in])

