

03-2021 // 2021-MAR-19
NEW JUNCTION BOX FOR ALL ORBIT8 SERIES

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GENERAL

A new electrical junction box is being developed for all ORBIT 8 series.

The new junction box offers new features for more user friendliness:

- Introduction of knock-outs for easier assembly process
- High numbers of connection possibilities and placement of knock-outs for cable glands
- Chamfered corner & bottom power entry feature
- More robust construction and materials (10% glass fiber reinforced polycarbonate)
- Meeting CE and UL requirements
- Minimum protection level of IP54
- Flammability rating of 5VA (UL94)
- Reduced fasteners and hinged cover

AFFECTED SERIES

All ORBIT 8 SERIES are concerned:

ORBIT GSD8, ORBIT GSD8 BOREAL, ORBIT+ GSU8, ORBIT FIT GED8



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NEW JUNCTION BOX

Knockouts are accesible from most sides, please find below a table indicating the possible knockout types, positions, and sizes:

	New junction have concept				
	New junction box concept				
	Knockout qty /	Reference	Actual	ISO designator	US designator conduit
	Knockout type	Reference	knockout size	"M" metric	size "G" gland
Power entry			ø50.3 mm	M50	G 1-1/2"
	2 / triple knockouts	Α	ø44.4 mm		G 1-1/2"
			ø35.3 mm		G 1-1/4"
		E	ø40.3 mm	M40	
			ø32.2 mm	M32	
			ø25.2 mm	M25	
	1/	D	ø32.2 mm	M32	
	double knockouts		ø 25.2 mm	M25	
Control wiring		Bx3	ø 22.6 mm		G 1/2"
	5/	D X 3	ø16.2 mm	M16	
	double knockouts	C x 2	ø 28. 5 mm		G 3/4"
			ø 20.2 mm	M20	



Note: every letter in the picture corresponds to a knockout, please refer to the table for knockout type and size

Left, bottom, and right views:







- The new design is backwards compatible, and will fit to existing studs on compressor body. Some re-routing of internal wiring might be needed.
- Compatible for all motor protection devices, except some version of the SE-B3 that do not have the DIN rail clip and the SE-i1.



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IMPORTANT DIMENSIONAL CHANGES

The new dimensions of the junction box are slightly different from the actual ones.

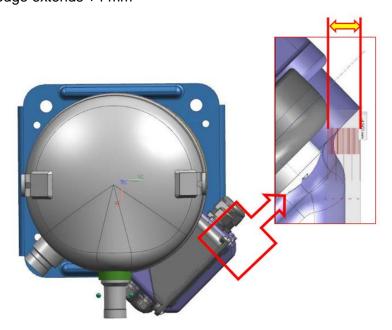
Comparing current (left) to proposed design (right, shown with all possible cable glands installed)





Superimposed view

- New box cover has chamfered edges
- Outermost edge extends +4 mm





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New 2D and 3D drawings are available on demand. Please contact your Sales Team.

TIMELINE FOR INTRODUCTION

- Implementation expected in new production starting in 3Q 2021
- SYR (USA) and BRT (China) will change-over in the same time period.
- As the production phase-in date is approached, BITZER will provide an updated notification with the following:
 - o Updated phase-in date and expected serial number cut-in
 - Updated compressor outline drawing and corresponding 3D CAD file (.stp format)
 - Updated spare parts drawing
 - o P/N, availability, and pricing for the junction box spare parts kit (box, cover & labels)
- Stock inventories may contain a mixture of old and new style for a period during the transition, all order details (pricing, ZMAV) remain the same
- Should you require samples previous to the introduction date, please contact the Sales Team and mention the customer and quantity required. Samples of new box should be available for customer use in mock-ups in mid-late May 2021.

SPARE PARTS

- Spare parts stocking will also transition to the new design after run-out of existing inventory
- An accessory kit including new box and new cover will be available to replace older style In case an OEM have a mixture of old and new junction boxes, but wants an uniform assembly in one unit, we can provide new junction boxes as SPA kit on demand.
 - Details about this will be communicated in a future sales information letter.
- Also note, the accessory acoustic sound blanket (P/N 37780501) will no longer fit the compressor. This will be modified at a future date.



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// In case of further questions, please contact:

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