

Technical Service Bulletin:

Installation Instructions for SM/LM Split CS with BVA2.0 AHU or BMAC Cased Coil Models

Models: SM/LM Split CS, BVA2.0 AHU, BMAC Cased Coils



BOSCH



Please read this entire document prior to proceeding with any work.



WARNING:

- ▶ This bulletin is intended to provide technical guidance to a professional who is qualified to work on gas boiler products and 110vac electrical components. If you are not qualified to work on such equipment, please obtain the services of such a professional.

Introduction

The SM/LM Split Condensing Section Models within the Bosch Water Source Heat Pump portfolio are unique in that they can be paired either with an SM/LM Split AH/AV Air Handler Section, BVA2.0 Air Handler, or BMAC Cased Coil. Additional instructions are needed for the installation of the BVA2.0 or BMAC Cased Coil so the specified efficiency levels are met.

Please always reference the specific product refrigerant charge information, additional refrigerant capacity for line-set length, and TXV setting (if adjustable) in the Installation, Operational, and Maintenance Manual (IOM) and Engineering Submittal Sheet (ESS) on the Bosch Climate website.

Instructions

Installing a BVA2.0 Air Handler:

When installing a BVA2.0 Air Handler it is important to follow all safety, caution, and warnings indicated in the IOM. There are three (3) instructions that are absolutely critical to the safe and reliable operation of the BVA2.0 Air Handler and SM/LM Split WSHP Condensing Section (CS).

1. Setting the Refrigerant Charge (please see table 1)
2. Setting the TXV on the SM/LM Condensing Section (CS) (please see table 2)
3. Setting the DIP switch in the BVA2.0 Air Handler (please see table 3)



Figure 1

Bosch WSHP Model (CS)	Air Handler Model			
	BVA-24WN1-M20	BVA-36WN1-M20	BVA-48WN1-M20	BVA-60WN1-M20
SM/LM024-CSC	-6			
SM/LM024-CSN	-9			
SM/LM036-CSC		0		
SM/LM036-CSN		0		
SM/LM048-CSC			13	
SM/LM048-CSN			8	
SM/LM060-CSC				0
SM/LM060-CSN				0

Table 1 SM/LM Split Condensing Section (CS) refrigerant charge (oz) adjustments with BVA2.0 Air Handler

Bosch WSHP Model (CS)	Air Handler Model			
	BVA-24WN1-M20	BVA-36WN1-M20	BVA-48WN1-M20	BVA-60WN1-M20
SM/LM024-CSC	None			
SM/LM024-CSN	None			
SM/LM036-CSC		SM/LM: 1 turn closed BVA: None		
SM/LM036-CSN		SM/LM: 1 turn closed BVA: None		
SM/LM048-CSC			SM/LM: 1 turn closed BVA: None	
SM/LM048-CSN			SM/LM: 1 turn closed BVA: None	
SM/LM060-CSC				SM/LM: 1 turn closed BVA: None
SM/LM060-CSN				SM/LM: 1 turn closed BVA: None

Table 2 SM/LM Split Condensing Section (CS) TXV adjustments with BVA2.0 Air Handler

	Factory Setting DIP Switch X13 taps (Hi/Lo)	Field Setting DIP Switch X13 taps (Hi/Lo)
BVA24	4/2	5/3
BVA36	4/2	5/3
BVA48	3/1	4/2
BVA60	4/2	5/3

Table 3 SM/LM Split Condensing Section (CS) DIP Switch adjustments with BVA2.0 Air Handler

Installing a BMAC Cased Coil:

When installing a BMAC Cased Coil it is important to follow all safety, caution, and warnings indicated in the IOM. There are two (2) instructions that are absolutely critical to the safe and reliable operation of the BVA2.0 Air Handler and SM/LM Split WSHP Condensing Section (CS).

1. Setting the Refrigerant Charge (please see table 4)
2. Setting the TXV on the SM/LM Condensing Section (CS) (please see table 5)

Bosch WSHP Model (CS)	Cased Coil Model			
	BMAC2430BNTD	BMAC3036BNTD	BMAC4248CNTF	BMAC4860CNTF
SM/LM024-CSC	-6			
SM/LM024-CSN	-9			
SM/LM036-CSC		0		
SM/LM036-CSN		0		
SM/LM048-CSC			13	
SM/LM048-CSN			8	
SM/LM060-CSC				0
SM/LM060-CSN				0

Table 4 SM/LM Split Condensing Section (CS) refrigerant charge (oz) adjustments with BMAC Cased Coil

Bosch WSHP Model (CS)	Cased Coil Model			
	BMAC2430BNTD	BMAC3036BNTD	BMAC4248CNTF	BMAC4860CNTF
SM/LM024-CSC	None			
SM/LM024-CSN	None			
SM/LM036-CSC		SM/LM: 1 turn closed BMAC: None		
SM/LM036-CSN		SM/LM: None BMAC: None		
SM/LM048-CSC			SM/LM: 1 turn closed BMAC: None	
SM/LM048-CSN			SM/LM: 1 turn closed BMAC: None	
SM/LM060-CSC				SM/LM: None BMAC: 1 turn closed
SM/LM060-CSN				SM/LM: None BMAC: 1 turn closed

Table 5 SM/LM Split Condensing Section (CS) TXV adjustments with BMAC Cased Coil



Bosch Thermotechnology Corp.
 65 Grove Street
 Watertown, MA 02472
 Tel: 1-866-642-3198
 Fax: 1-603-965-7581
 www.boschheatingandcooling.com