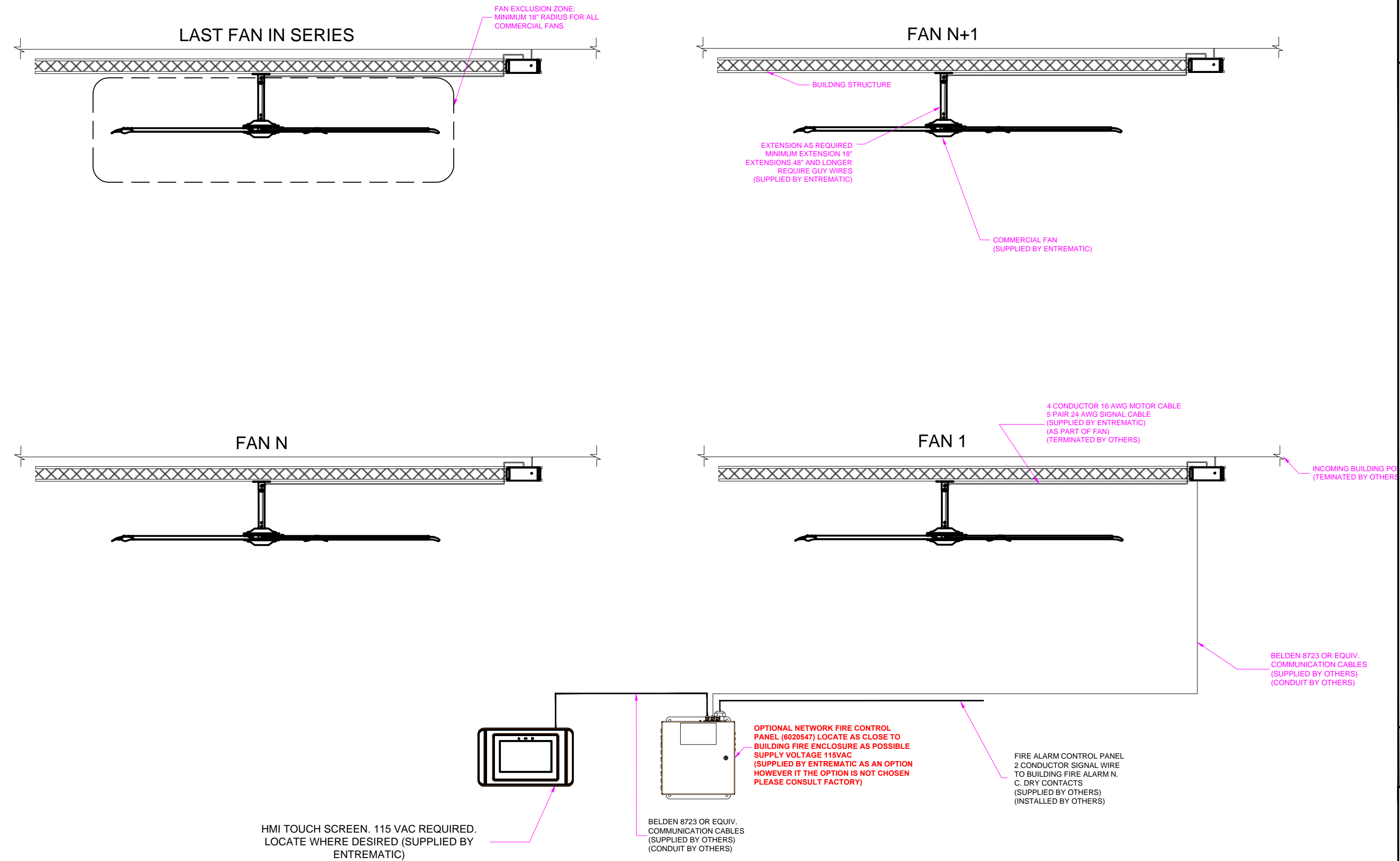


Commercial Fan Layout



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NOTES:

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3) ELECTRICAL DISCONNECT AND FUSING PROVIDED BY OTHERS.

4) GENERAL CONTRACTOR SHALL ENSURE EQUIPMENT INSTALLATION MEETS ALL APPLICABLE BUILDING CODES.

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7) MULTI-FAN INSTALLATION INCLUDES ONE TOUCHSCREEN HMI KIT.

8) ALL CONDUIT BY OTHERS

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(C) ALL HVLS FANS SHALL BE INTERLOCKED TO SHUT DOWN IMMEDIATELY UPON RECEIVING A WATERFLOW SIGNAL FROM THE ALARM SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 72.

REVIEW DRAWING

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OR PROFESSIONAL  
ENGINEER FOR ALL LOADS ANALYSIS AND SPECIFICATIONS CONFORMITY.

Firm Name and Address

by

ENTREMATIC

1612 Hutton Drive, Suite 140  
Carrollton, TX 75006

Drawn By:

CRE

Regional Sale Manager:

TBD

Date:

02/26/2019

Drawing Number:

6020689S

Scale:

NTS

Sheet Number:

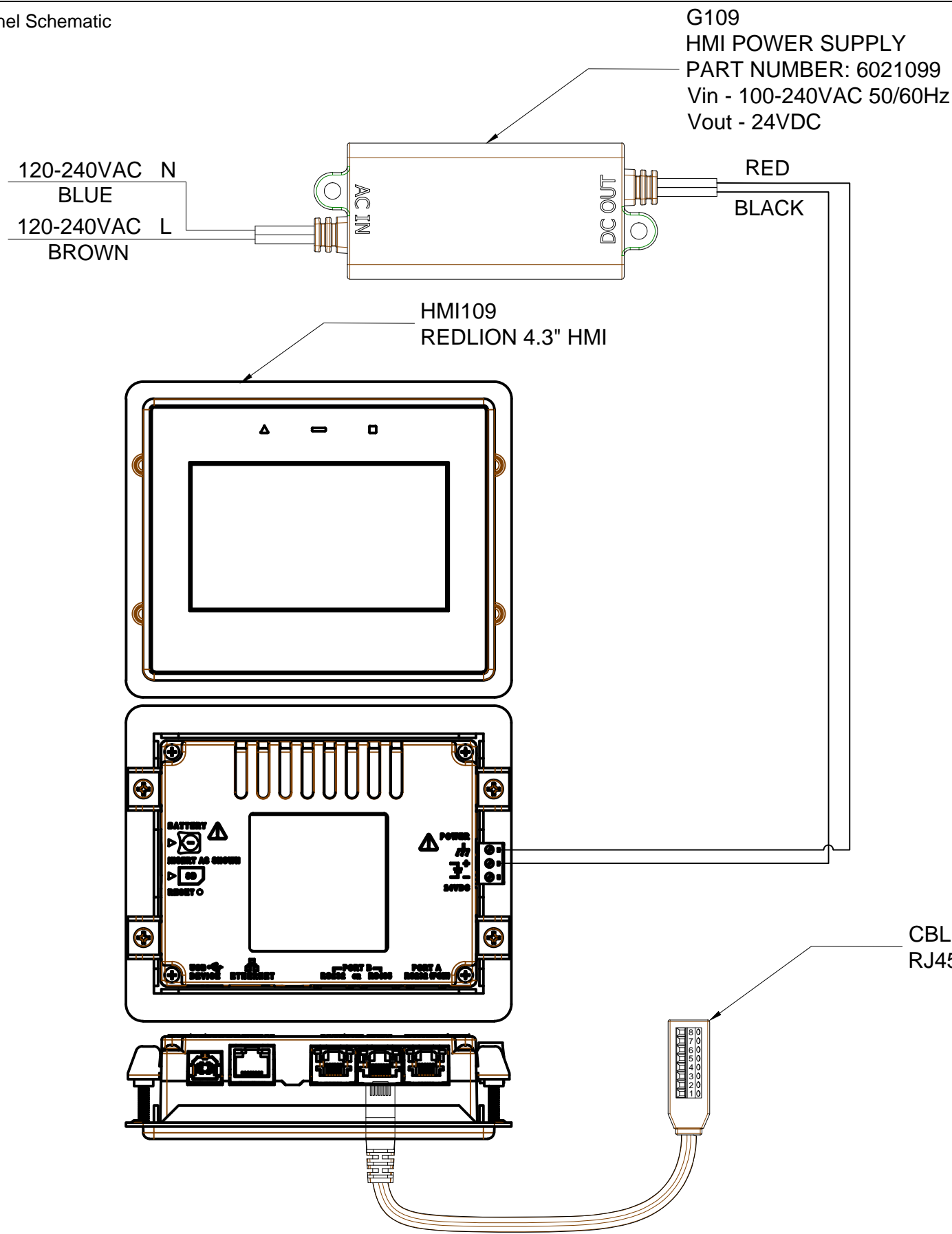
4 OF 10

Rev:

E

Revision	Date	Drawn By	Description	Revision	Date	Reference	Description
A	11/17/2017	CRE	Original Drawing	E	02/26/2019	CRE	UPDATED DRAWING TO NEW REDLION DISPLAY
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Panel Schematic



01/22/19 BOM				
TAG	DESCRIPTION	QTY	CATALOG	MFG
HMI109	4.3" TOUCH SCREEN	1	6020691	REDLION
G109	POWER SUPPLY, 24VDC, 8A	1	6021099	MEAN WELL
	COMPACT SPLICING TERMINAL	2	6019512	WAGO
	ENCLOSURE, OKW, 4.3IN TOUCHSCREEN	1	6020690	OKW
CBL109	RJ45 8 POSITION 6" PIGTAIL	1	6021619	CALRAD

System Information

- 12 Fans Max
- 3 Groups Max
- Timer Controls \*Standard\*
- Temperature Control \*Optional\*
- BMS Integration \*BACnet TCP/IP\*
- Requires 120 V Power Supply
- NEMA 4X Indoor Rated
- Password Lockout Capable
- Field Configurable
  - All Communication Cable by Others

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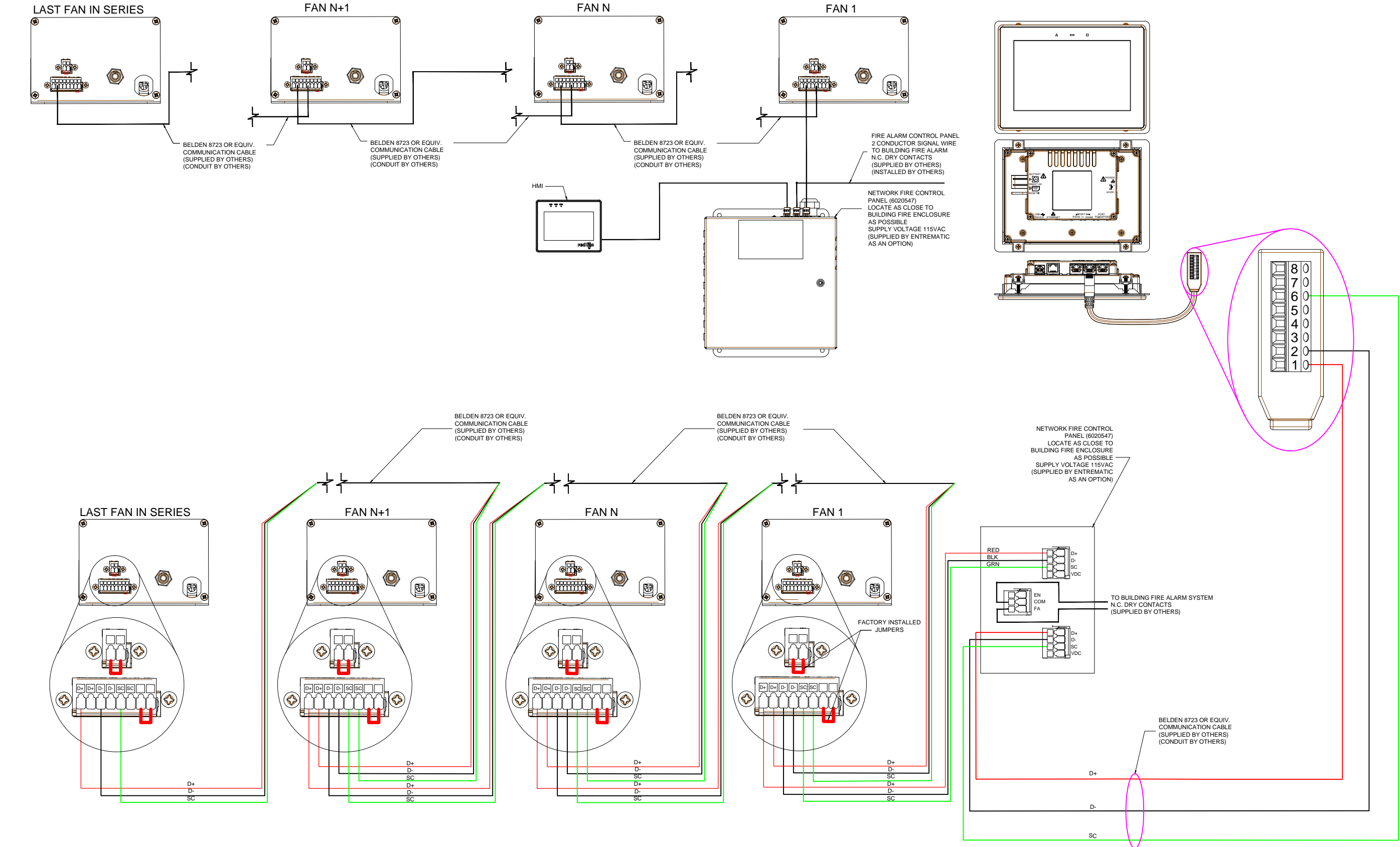
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1612 Hutton Drive, Suite 140  
Carrollton, TX 75006

Drawn By: <b>CRE</b>	Regional Sale Manager: <b>TBD</b>	
Date: <b>02/26/2019</b>	Drawing Number: <b>6020689S</b>	
Scale: <b>NTS</b>	Sheet Number: <b>1 OF 10</b>	Rev: <b>E</b>

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Commercial Fan Field Wiring



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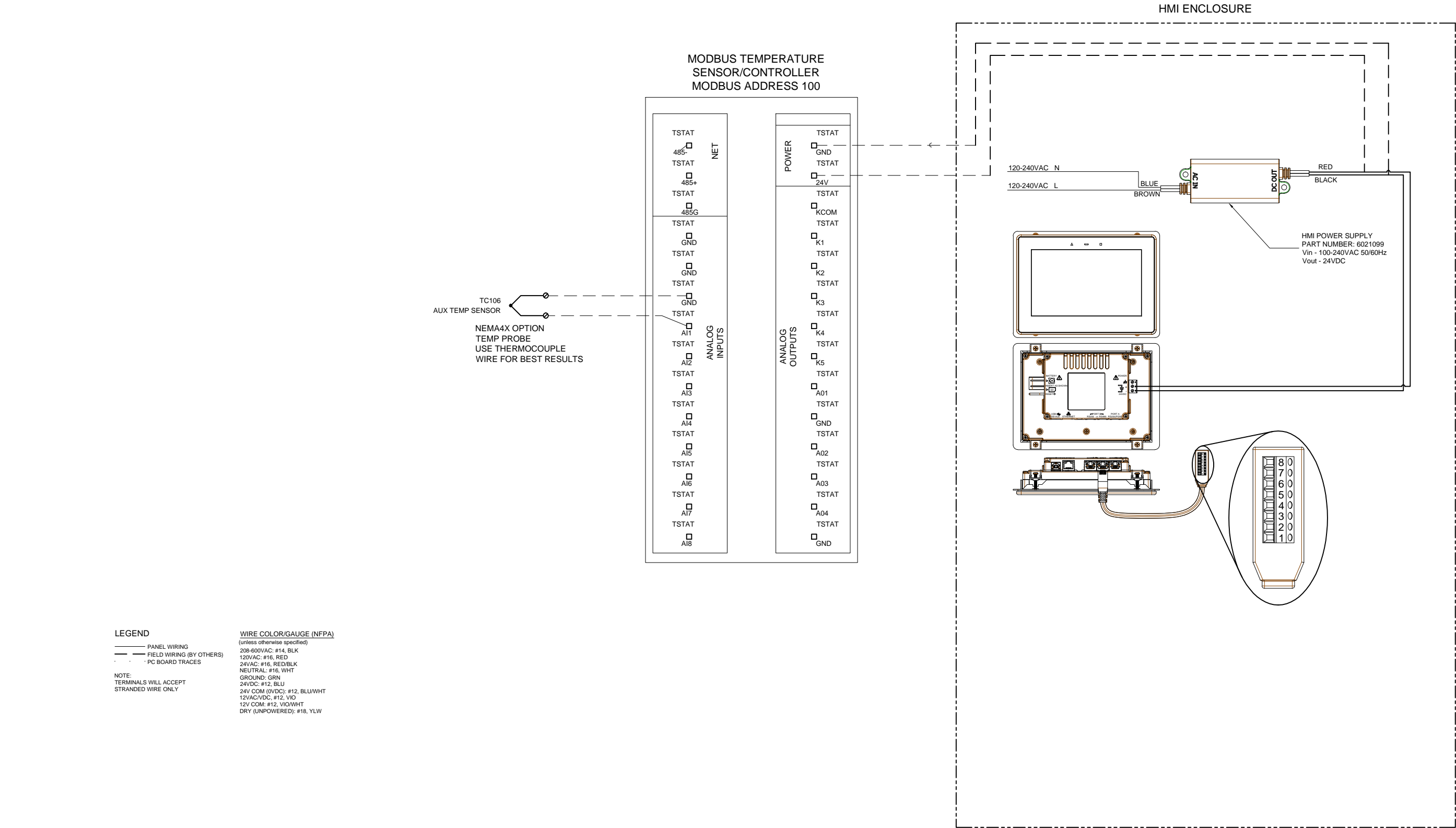
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Firm Name and Address

by  
**ENTREMATIC**  
1612 Hutton Drive, Suite 140  
Carrollton, TX 75006

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Scale:	NTS	Sheet Number:	5 OF 10
		Rev:	E



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Drawn By:	Regional Sale Manager:	
CRE	TBD	
Date:	Drawing Number:	
02/26/2019	6020689S	
Scale:	Sheet Number:	Rev:
NTS	7 OF 10	E

BACnet Mapping

Fan	BACnet Address	Register Description	Expected Data Industrial	Expected Data Commercial	Result/Status	Notes
Fan 1	AO0001	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0002	Direction	-1		Reverse	
			1		Forward	
	AO0003	Speed set	1-10		Speed	
	AO0004	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0001	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0002	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 2	AO0005	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0006	Direction	-1		Reverse	
			1		Forward	
	AO0007	Speed set	1-10		Speed	
	AO0008	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0005	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0006	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 3	AO0009	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0010	Direction	-1		Reverse	
			1		Forward	
	AO0011	Speed set	1-10		Speed	
	AO0012	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0009	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0010	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 4	AO0013	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0014	Direction	-1		Reverse	
			1		Forward	
	AO0015	Speed set	1-10		Speed	
	AO0016	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0013	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0014	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 5	AO0017	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0018	Direction	-1		Reverse	
			1		Forward	
	AO0019	Speed set	1-10		Speed	
	AO0020	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0017	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0018	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 6	AO0021	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0022	Direction	-1		Reverse	
			1		Forward	
	AO0023	Speed set	1-10		Speed	
	AO0024	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0021	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0022	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 7	AO0025	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0026	Direction	-1		Reverse	
			1		Forward	
	AO0027	Speed set	1-10		Speed	
	AO0008	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0025	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0026	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 8	AO0029	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0030	Direction	-1		Reverse	
			1		Forward	
	AO0031	Speed set	1-10		Speed	
	AO0032	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0029	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0030	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 9	AO0033	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0034	Direction	-1		Reverse	
			1		Forward	
	AO0035	Speed set	1-10		Speed	
	AO0036	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0033	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0034	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 10	AO0037	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0038	Direction	-1		Reverse	
			1		Forward	
	AO0039	Speed set	1-10		Speed	
	AO0040	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0037	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0038	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan

Fan	BACnet Address	Register Description	Expected Data Industrial	Expected Data Commercial	Result/Status	Notes
Fan 6	AO0021	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0022	Direction	-1		Reverse	
			1		Forward	
	AO0023	Speed set	1-10		Speed	
	AO0024	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0021	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0022	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 7	AO0025	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0026	Direction	-1		Reverse	
			1		Forward	
	AO0027	Speed set	1-10		Speed	
	AO0008	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0025	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0026	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 8	AO0029	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0030	Direction	-1		Reverse	
			1		Forward	
	AO0031	Speed set	1-10		Speed	
	AO0032	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0029	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0030	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 9	AO0033	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0034	Direction	-1		Reverse	
			1		Forward	
	AO0035	Speed set	1-10		Speed	
	AO0036	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0033	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0034	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
Fan 10	AO0037	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0038	Direction	-1		Reverse	
			1		Forward	
	AO0039	Speed set	1-10		Speed	
	AO0040	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0037	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0038	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan

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Firm Name and Address



1612 Hutton Drive, Suite 140  
Carrollton, TX 75006

Drawn By: CRE Regional Sale Manager: TBD

Date: 02/26/2019 Drawing Number: 6020689S

Scale: NTS Sheet Number: 8 OF 10 Rev: E



Fan	BACnet Address	Register Description	Expected Data Industrial	Expected Data Commercial	Result/Status	Notes
Fan 11	AO0041	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0042	Direction	-1		Reverse	
			1		Forward	
	AO0043	Speed set	1-10		Speed	
	AO0044	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0041	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 12	AO0045	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0046	Direction	1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0047	Speed set	-1		Reverse	
			1		Forward	
	AO0048	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
Fan 13	AO0049	Fan Mode	1		Drive Running	
			2		Forward	
			4		Reverse	
			0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
	AO0050	Direction	0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
	AI0049	Fan Status	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
Fan 14	AO0053	Fan Mode	-1		Reverse	
			1		Forward	
			1-10		Speed	
			> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0053	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
	AI0054	Motor speed	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
	AI0055	Motor Current	0-5		VFD Output Current	
	AI0056	Fault Code	*		See Table	Fault Codes listed in Fault code table
Fan 15	AO0057	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature sensor option required
			3		Humidity Run Mode	Humidity sensor option required
	AO0058	Direction	-1		Reverse	
			1		Forward	
	AO0059	Speed set	1-10		Speed	
	AO0060	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0057	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 16	AO0061	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0062	Direction	1		Start	
			2		Temp Run Mode	Temperature sensor option required
	AO0063	Speed set	-1		Reverse	
			1		Forward	
	AO0064	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0061	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 17	AO0065	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0066	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0067	Speed set	-1		Reverse	
			1		Forward	
	AO0068	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0065	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 18	AO0069	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0070	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0071	Speed set	-1		Reverse	
			1		Forward	
	AO0072	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0069	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 19	AO0073	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0074	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0075	Speed set	-1		Reverse	
			1		Forward	
	AO0076	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0073	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 20	AO0077	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0078	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0079	Speed set	-1		Reverse	
			1		Forward	
	AO0080	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0077	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	

Fan	BACnet Address	Register Description	Expected Data Industrial	Expected Data Commercial	Result/Status	Notes
Fan 16	AO0061	Fan Mode	0		Stop	
			1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
			3		Humidity Run Mode	Humidity Sensor Option Required
	AO0062	Direction	-1		Reverse	
			1		Forward	
	AO0063	Speed set	1-10		Speed	
	AO0064	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0061	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 17	AO0065	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0066	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0067	Speed set	-1		Reverse	
			1		Forward	
	AO0068	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0065	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 18	AO0069	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0070	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0071	Speed set	-1		Reverse	
			1		Forward	
	AO0072	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0069	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 19	AO0073	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0074	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0075	Speed set	-1		Reverse	
			1		Forward	
	AO0076	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0073	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	
Fan 20	AO0077	Fan Mode	0-60	0-200	VFD output frequency	Max frequency can vary based on size of fan
			0-5		VFD Output Current	
			*		See Table	Fault Codes listed in Fault code table
			0		Stop	
	AO0078	Direction	1		Start	
			2		Temp Run Mode	Temperature Sensor Option Required
	AO0079	Speed set	-1		Reverse	
			1		Forward	
	AO0080	Fan Reset	> 0	0	Fault Reset	Only reset in the case of a fault condition
	AI0077	Fan Status	1		Drive Running	
			2		Forward	
			4		Reverse	

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NOTES:

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2) RECOMMENDED COMMUNICATION CABLE BELDEN 8723

3) ALL CONDUIT BY OTHERS

**REVIEW DRAWING**  
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Firm Name and Address

by

ENTREMATIC

1612 Hutton Drive, Suite 140  
Carrollton, TX 75006

Drawn By: CRE Regional Sale Manager: TBD

Date: 02/26/2019 Drawing Number: 6020689S

Scale: NTS Sheet Number: 9 OF 10 Rev: E

Revision	Date	Drawn By	Description
A	11/17/2017	CRE	Original Drawing
B	04/11/2018	CRE	Added industrial fans and removed fuse from panel schematic.
C	09/27/2018	CRE	UPDATED BACNET MAPPING FOR NEW PROGRAM
D	01/22/2019	CRE	Added Frequency for Input power to 24VDC PSU for HMI

Revision	Date	Reference	Description
E	02/26/2019	CRE	UPDATED DRAWING TO NEW REDLION DISPLAY

Device	BACnet Address	Register Description	Expected Data	Result/Status	Notes
Temp1	AO0081	Forward Start SP	> 0	Temperature SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0082	Reverse Start SP	> 0	Temperature SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0083	Forward increment SP	> 0	Temperature FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0084	Reverse increment SP	> 0	Temperature REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0081	Scaled Temperature	##	Temperature FB	
Temp2	AO0085	Forward Start SP	> 0	Temperature SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0086	Reverse Start SP	> 0	Temperature SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0087	Forward increment SP	> 0	Temperature FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0088	Reverse increment SP	> 0	Temperature REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0082	Scaled Temperature	##	Temperature FB	
Temp3	AO0089	Forward Start SP	> 0	Temperature SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0090	Reverse Start SP	> 0	Temperature SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0091	Forward increment SP	> 0	Temperature FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0092	Reverse increment SP	> 0	Temperature REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0083	Scaled Temperature	##	Temperature FB	
Temp4	AO0093	Forward Start SP	> 0	Temperature SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0094	Reverse Start SP	> 0	Temperature SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0095	Forward increment SP	> 0	Temperature FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0096	Reverse increment SP	> 0	Temperature REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0084	Scaled Temperature	##	Temperature FB	
Humid1	AO0097	Forward Start SP	> 0	Humidity SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0098	Reverse Start SP	> 0	Humidity SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0099	Forward increment SP	> 0	Humidity FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0100	Reverse increment SP	> 0	Humidity REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0085	Humidity	##	Humidity FB	
Humid2	AO0101	Forward Start SP	> 0	Humidity SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0102	Reverse Start SP	> 0	Humidity SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0103	Forward increment SP	> 0	Humidity FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0104	Reverse increment SP	> 0	Humidity REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0086	Humidity	##	Humidity FB	
Humid3	AO0105	Forward Start SP	> 0	Humidity SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0106	Reverse Start SP	> 0	Humidity SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0107	Forward increment SP	> 0	Humidity FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0108	Reverse increment SP	> 0	Humidity REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0087	Humidity	##	Humidity FB	
Humid4	AO0109	Forward Start SP	> 0	Humidity SP to Start in Forward	Scaled by 10, so write 800 to get a value of 80
	AO0110	Reverse Start SP	> 0	Humidity SP to Start in Reverse	Scaled by 10, so write 300 to get a value of 30
	AO0111	Forward increment SP	> 0	Humidity FWD Inc	Scaled by 10, so write 300 to get a value of 30
	AO0112	Reverse increment SP	> 0	Humidity REV Inc	Scaled by 10, so write 300 to get a value of 30
	AI0088	Humidity	##	Humidity FB	
Wind	AO0113	Wind Set Point	5-15	Set Point to shut off fans	5-15 MPH
	AO0110	Time	1-20	Seconds before shut off	Time above set point before shutoff
	AO0111	Restart Time	>60	Seconds before restart	Time below set point before restart
	AI0089	Scaled Wind Speed	##	Wind Speed	Displayed in the selected units
	AI0090	Direction	##	Wind Direction	

TABLE 2- FAULT CODES INDUSTRIAL CLASS FANS			
DATA	DECIMAL VALUE	PANEL INDICATION	DESCRIPTION
H10	16	E.OC1	OVERCURRENT TRIP DURING ACCELERATION
H11	17	E.OC2	OVERCURRENT TRIP DURING CONSTANT SPEED
H12	18	E.OC3	OVERCURRENT TRIP DURING DECELERATION OR STOP
H20	32	E.OV1	REGENERATIVE OVERVOLTAGE TRIP DURING ACCELERATION
H21	33	E.OV2	REGENERATIVE OVERVOLTAGE TRIP DURING CONSTANT SPEED
H22	34	E.OV3	REGENERATIVE OVERVOLTAGE TRIP DURING DECELERATION OR STOP
H30	48	E.THT	INVERTER OVERLOAD TRIP (ELECTRONIC THERMAL RELAY FUNCTION)
H31	49	E.THM	MOTOR OVERLOAD TRIP (ELECTRONIC THERMAL RELAY FUNCTION)
H40	64	E.FIN	FIN OVERHEAT
H52	82	E.ILF	INPUT PHASE LOSS
H60	96	E.OLT	STALL PREVENTION
H70	112	E.BE	BRAKE TRANSISTOR ALARM DETECTION
H80	128	E.GF	OUTPUT SIDE EARTH (GROUND) FAULT OVERCURRENT AT START
H81	129	E.LF	OUTPUT PHASE LOSS
H90	144	E.OHT	EXTERNAL THERMAL RELAY OPERATION
H91	145	E.PTC	PTC THERMISTOR OPERATION
HB0	176	E.PFE	PARAMETER STORAGE DEVICE FAULT
HB1	177	E.PUE	PU DISCONNECTION
HB2	178	E.RET	RETRY COUNT EXCESS
HC0	192	E.CPU	CPU FAULT
HC4	196	E.CDO	OUTPUT CURRENT DETECTION VALUE EXCEEDED
HC5	197	E.IOH	INRUSH CURENT LIMIT CIRCUIT FAULT
HC7	199	E.AIE	ANALOG INPUT FAULT
HC9	201	E.SAF	SAFETY CIRCUIT FAULT
HF5	245	E.S	CPU FAULT

TABLE 2 - FAULT CODES COMMERCIAL CLASS FANS	
DATA	DESCRIPTION
0	NO ALARM/FAN OK
1	SHORT CIRCUIT
2	CURRENT LIMIT
3	CURRENT LIMIT TRIP
4	UNDER VOLTAGE TRIP
6	OVER VOLTAGE TRIP
8	STOP MODE
9	FLASH ERROR
13	WATCHDOG ERROR
22	COMMUNICATION WATCHDOG ERROR

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ENTREMATIC

1612 Hutton Drive, Suite 140  
Carrollton, TX 75006

Drawn By:

CRE

Regional Sale Manager:

TBD

Date:

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Drawing Number:

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10 OF 10

Rev:

E