



Broadcast Electronics Inc.

4100 North 24th Street, Quincy, Illinois 62305 USA • Phone (217) 224-9600 • Fax (217) 224-9607 • www.bdcast.com • bdcast@bdcast.com



STX-3 example

STX AC Power Distribution Option

Breaker Panel Installation

Application Guide

597-4301
07/09/10
Rev. B

STX AC Power Distribution Option

Breaker Panel Installation

Application Guide

©2010 Broadcast Electronics Inc. All rights reserved.

The information in this publication is subject to improvement and change without notice. Although every effort is made to ensure the accuracy of the information in this manual, Broadcast Electronics Inc. accepts no responsibility for any errors or omissions. Broadcast Electronics Inc. reserves the right to modify and improve the design and specifications of the equipment in this manual without notice. Any modifications shall not adversely affect performance of the equipment so modified.

Proprietary Notice

This document contains proprietary data of Broadcast Electronics Inc. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, translated into any other language in any form or by any means, electronic or mechanical, including photocopying or recording, for any purpose, without the express written permission of Broadcast Electronics Inc.

Trademarks

Broadcast Electronics and the BE logo are registered trademarks of Broadcast Electronics Inc.

All other trademarks are property of their respective owners.

Table of Contents

- 1 STX AC Power Distribution panel..... 1**
 - 1.1 Overview of Installing the AC Distribution Panel..... 1

- 2 Installation Preparation..... 1**
 - 2.1 Overview / Estimated Completion Time For Installation 1
 - 2.2 Items / Tools required for the Upgrade Process 1
 - 2.3 Install the Optional AC Power Distribution Panel 2

- 3 RF Technical Services Contact Information..... 2**

- 4 Schematics..... 3**



1 STX AC Power Distribution panel

1.1 Overview of Installing the AC Distribution Panel.

There are different configurations of the STX AC power Distribution panel depending on the number of amplifiers in your transmitter, and the input AC configuration. There are different panels for the STX-3 and STX-5, for single phase, 3-phase Delta and 3-phase. STX-2 is only available in single. However, the installation follows a similar sequence.

<u>MODEL</u>	<u>PART NUMBER</u>
STX-2 Single phase	909-4201-100
STX-3 Single phase	909-4301-100
STX-3 Three phase Delta	909-4301-200
STX-3 Three phase WYE	909-4301-300
STX-5 Single phase	909-4501-100
STX-5 Three phase Delta	909-4501-200
STX-5 Three phase WYE	909-4501-300

2 Installation Preparation

2.1 Overview / Estimated Completion Time For Installation

B.E. STX LP AC Power Distribution panel contains the necessary items to connect the input mains AC voltage to the STX in a convenient manner. Installing the AC Distribution panel enables you to make one AC cable run from your main disconnect box to this panel. AC power cables with this panel will connect to each individual amplifier and the combiner. Installation will take about 35 minutes after the unit is in the rack and primary AC is routed into the rack.

2.2 Items / Tools required for the Upgrade Process

- No. 2 Phillips Screwdriver
- 3/8" flat blade screw driver
- One of the above AC Power Distribution Panels.
- 3/16" Allen wrench





WARNING: ENSURE ALL PRIMARY POWER IS DISCONNECTED BEFORE PROCEEDING.

2.3 Install the Optional AC Power Distribution Panel

Follow all Electrical codes when wiring the STX AC Power Distribution panel. Refer to the following diagrams for your specific distribution panel.

Connect circuit breaker #1 to the first (Main) PA and to the Combiner with the provided wires. Subsequent units will be connected as shown; circuit breaker #2 to PA #2, etc.

STX-2 connects up the same as the STX-3 single phase with the exception of the third PA and breaker size as noted on the STX-3 Single phase diagram.

3 RF Technical Services Contact Information

RF Technical Services -

Telephone: (217) 224-9617

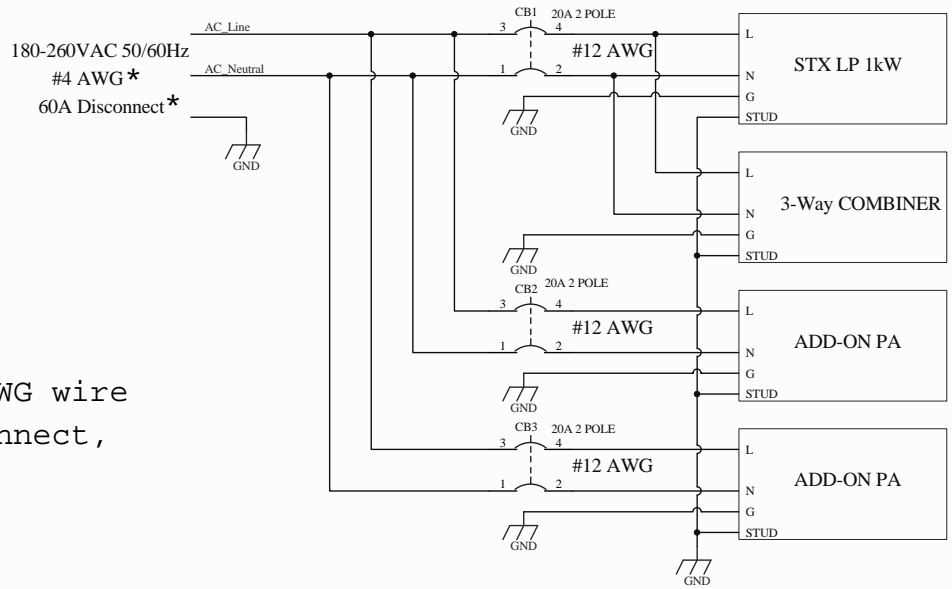
E-Mail: rfservice@bdcast.com

Fax: (217) 224-6258






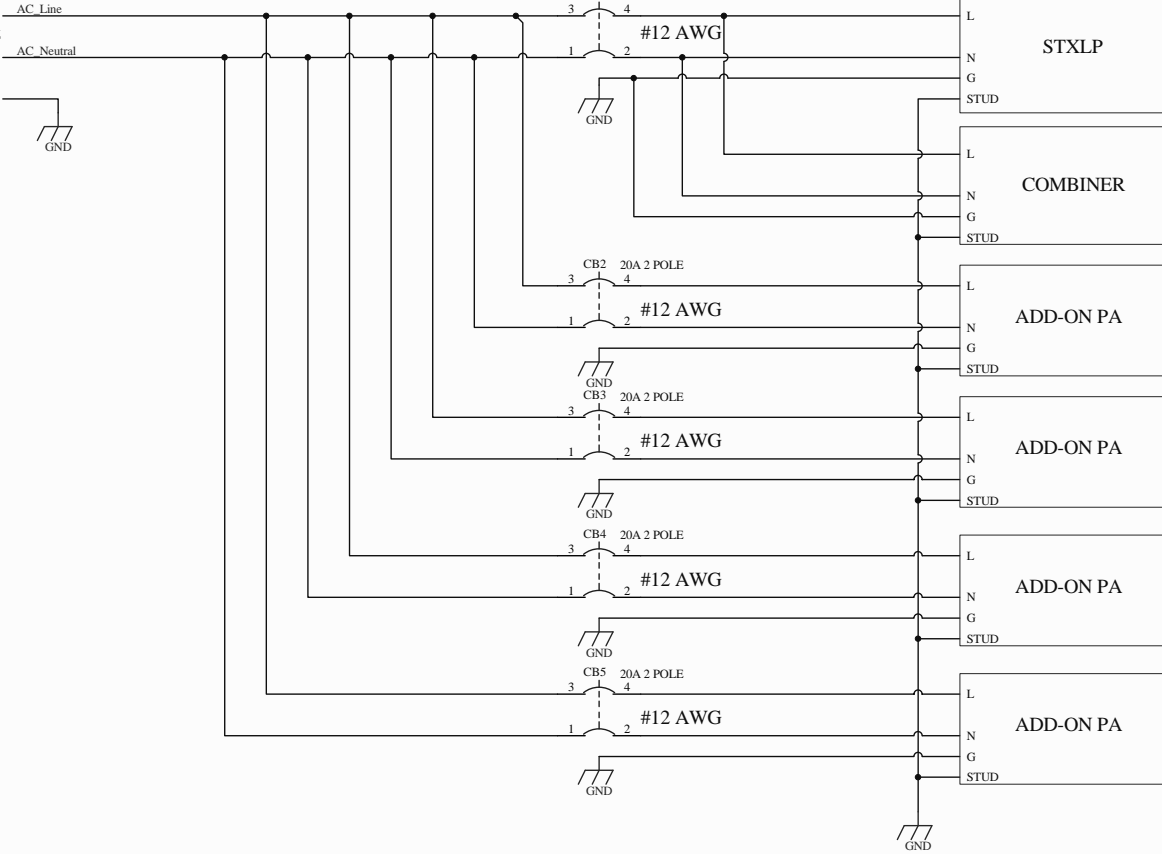
REVISIONS				
REV	DATE	DESCRIPTION	DRAFTER	ECN



* STX-2 uses #8 AWG wire and a 40 amp Disconnect, 2-way combiner and one add-on unit.

DESIGNER	MATERIAL		BROADCAST ELECTRONICS INC.	
ENGINEER	FINISH		4100 N. 24TH ST., P.O.BOX 3606 QUINCY, IL. 62305 217/224-9600 FAX 217/224-9607	
<small>PROPRIETARY RIGHTS are included in information disclosed herein. This information is submitted in confidence and neither this document nor the information disclosed herein shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by BROADCAST ELECTRONICS, INC.</small>		<small>TOLERANCE U.O.S. .x + .030 .xx + .015 .xxx + .005 ANGLES + 1</small>		TITLE Single Phase STX-3
TYPE	SIZE B	DWG. NO.	REV	002
MODEL	SCALE	SHEET	OF	

180-260VAC 50/60Hz
#2 AWG
100A Disconnect



REV		DATE	DESCRIPTION	DRAFTER	ECN

DESIGNER	MATERIAL
ENGINEER	FINISH
<small>PROPRIETARY RIGHTS are included in information disclosed herein. This information is submitted in confidence and neither this document nor the information disclosed herein shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by BROADCAST ELECTRONICS, INC.</small>	
<small>TOLERANCE U.O.S. .x + .030 .xx + .015 .xxx + .005 ANGLES + 1</small>	

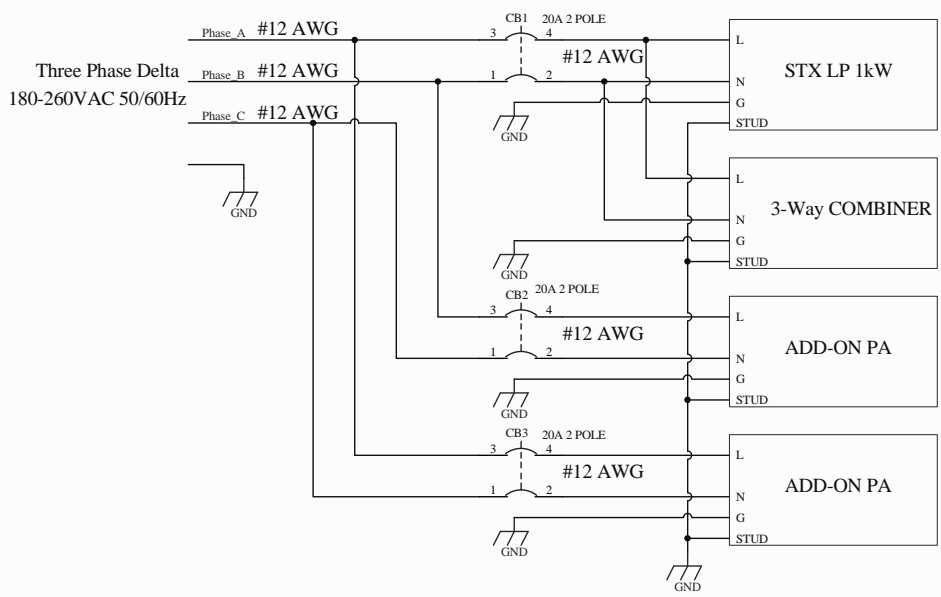



BROADCAST ELECTRONICS INC.

4100 N. 24TH ST., P.O. BOX 3606 QUINCY, IL. 62305
217/224-9600 FAX 217/224-9607

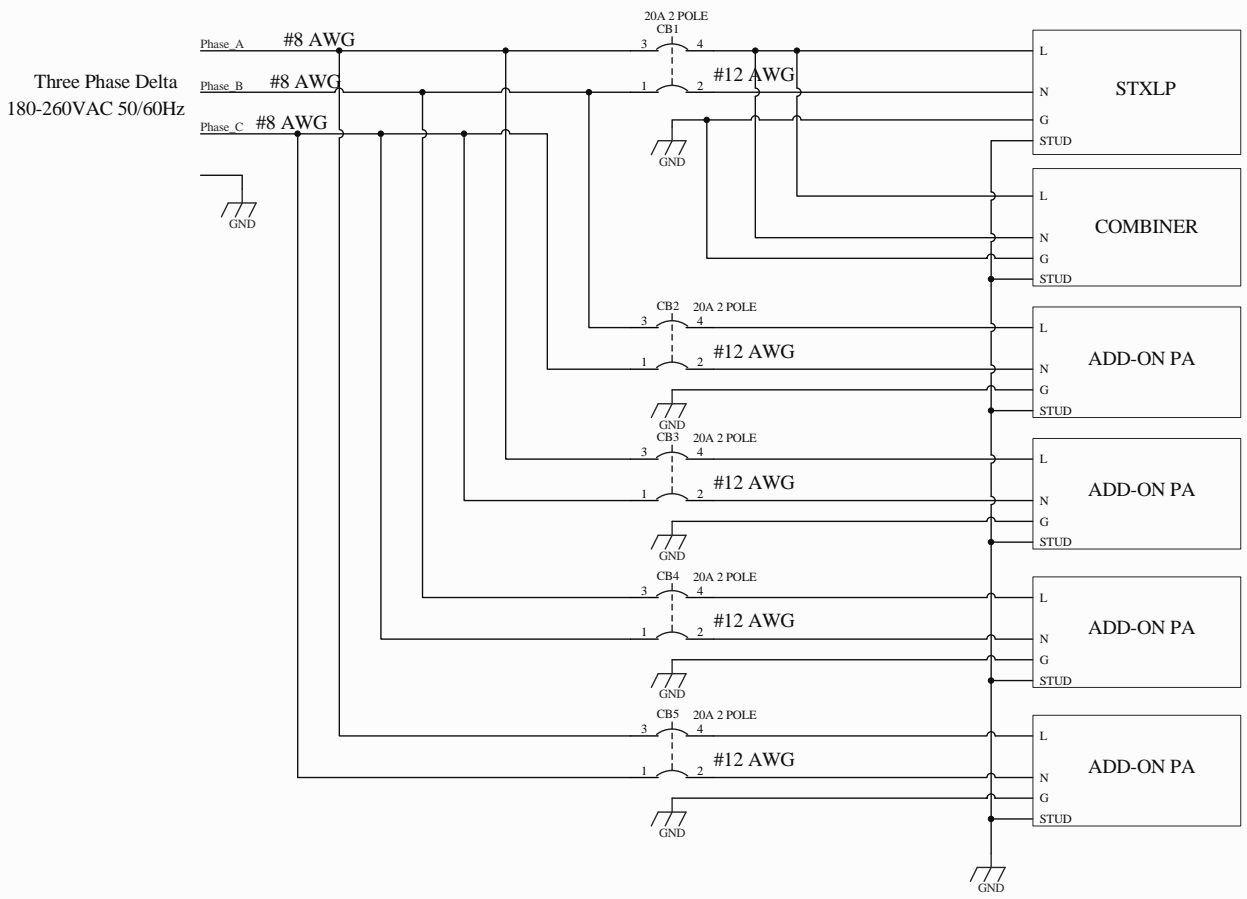
TITLE Single Phase STX-5				REV 002
TYPE	SIZE B	DWG. NO.	SCALE	SHEET OF

REVISIONS				
REV	DATE	DESCRIPTION	DRAFTER	ECN



DESIGNER	MATERIAL		BROADCAST ELECTRONICS INC.	
ENGINEER	FINISH		4100 N. 24TH ST., P.O. BOX 3606 QUINCY, IL. 62305 217/224-9600 FAX 217/224-9607	
<small>PROPRIETARY RIGHTS are included in information disclosed herein. This information is submitted in confidence and neither this document nor the information disclosed herein shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by BROADCAST ELECTRONICS, INC.</small>		<small>TOLERANCE U.O.S. .x + .030 .xx + .015 .xxx + .005 ANGLES + 1</small>	TITLE Three Phase Delta STX-3	
TYPE	SIZE B	DWG. NO.	REV002	
MODEL	SCALE	SHEET	OF	

REV		DATE	DESCRIPTION	DRAFTER	ECN



DESIGNER	MATERIAL
ENGINEER	FINISH

BROADCAST ELECTRONICS INC.

4100 N. 24TH ST., P.O. BOX 3606 QUINCY, IL. 62305

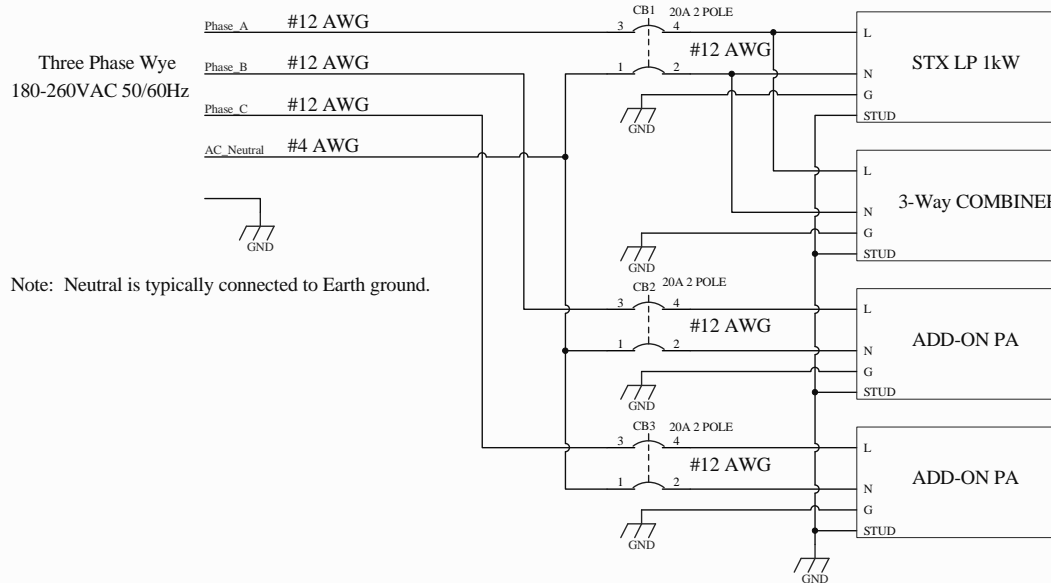
217/224-9600 FAX 217/224-9607

PROPRIETARY RIGHTS are included in information disclosed herein. This information is submitted in confidence and neither this document nor the information disclosed herein shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by BROADCAST ELECTRONICS, INC.

TOLERANCE U.O.S.
 .x + .030
 .xx + .015
 .xxx + .005
 ANGLES + 1

TITLE Three Phase Delta STX-5				REV 002
TYPE	SIZE B	DWG. NO.	SCALE	SHEET OF

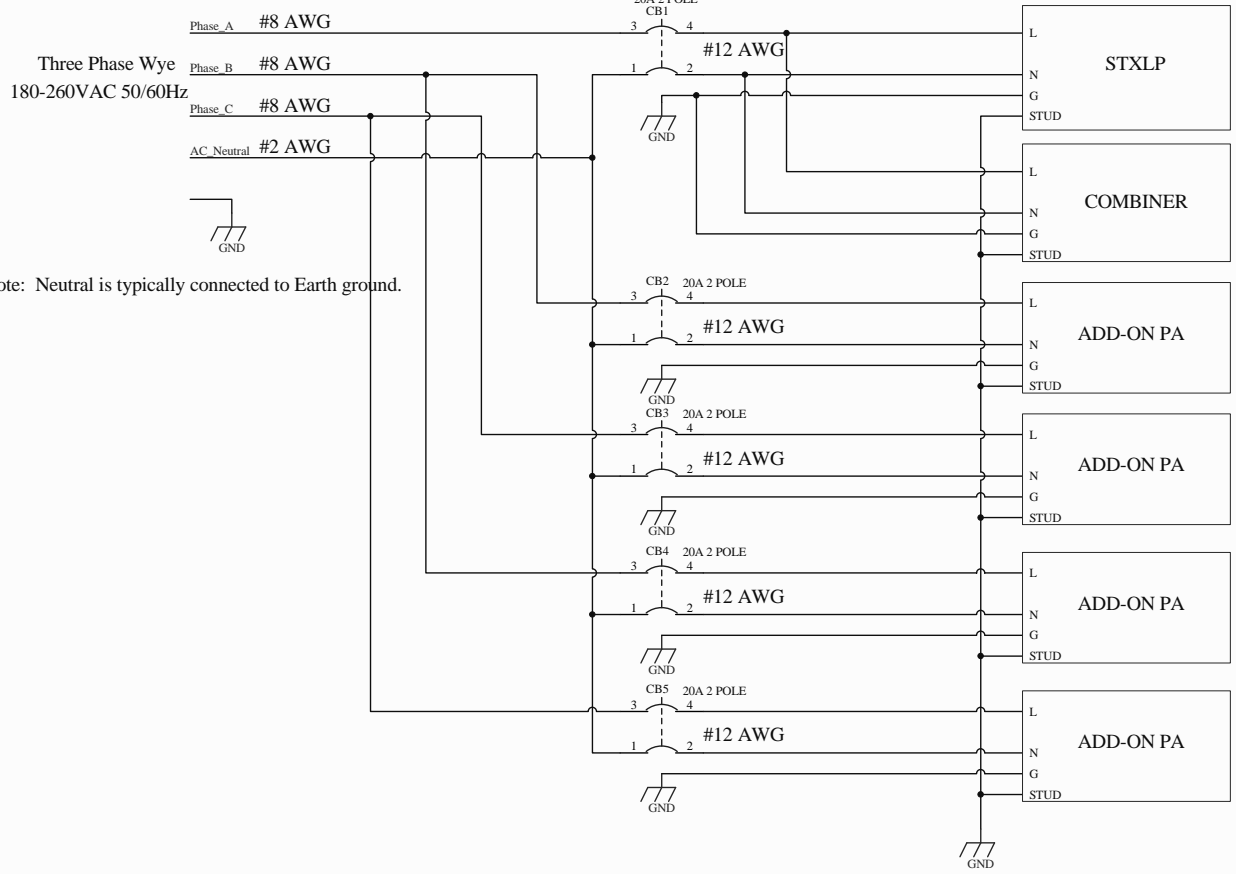
REV		DATE	DESCRIPTION	DRAFTER	ECN



DESIGNER	MATERIAL
ENGINEER	FINISH
<small>PROPRIETARY RIGHTS are included in information disclosed herein. This information is submitted in confidence and neither this document nor the information disclosed herein shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by BROADCAST ELECTRONICS, INC.</small>	
<small>TOLERANCE U.O.S. .x + .030 .xx + .015 .xxx + .005 ANGLES + 1</small>	

	BROADCAST ELECTRONICS INC. <small>4100 N. 24TH ST., P.O. BOX 3606 QUINCY, IL. 62305 217/224-9600 FAX 217/224-9607</small>	
	TITLE Three Phase Wye STX-3	
<small>TYPE</small>	<small>SIZE B</small>	<small>DWG. NO.</small>
<small>MODEL</small>	<small>SCALE</small>	<small>SHEET OF</small>
<small>REV 002</small>		<small>OF</small>

REV		DATE	DESCRIPTION	DRAFTER	ECN



Note: Neutral is typically connected to Earth ground.

DESIGNER	MATERIAL
ENGINEER	FINISH

BROADCAST ELECTRONICS INC.

4100 N. 24TH ST., P.O. BOX 3606 QUINCY, IL 62305

217/224-9600 FAX 217/224-9607

PROPRIETARY RIGHTS are included in information disclosed herein. This information is submitted in confidence and neither this document nor the information disclosed herein shall be reproduced or transferred to other documents or used or disclosed to others for manufacturing or for any other purpose except as specifically authorized in writing by BROADCAST ELECTRONICS, INC.

TOLERANCE U.O.S.
 .x + .030
 .xx + .015
 .xxx + .005
 ANGLES + 1

TITLE Three Phase Wye STX-5				REV 002
TYPE	SIZE B	DWG. NO.	SCALE	SHEET OF