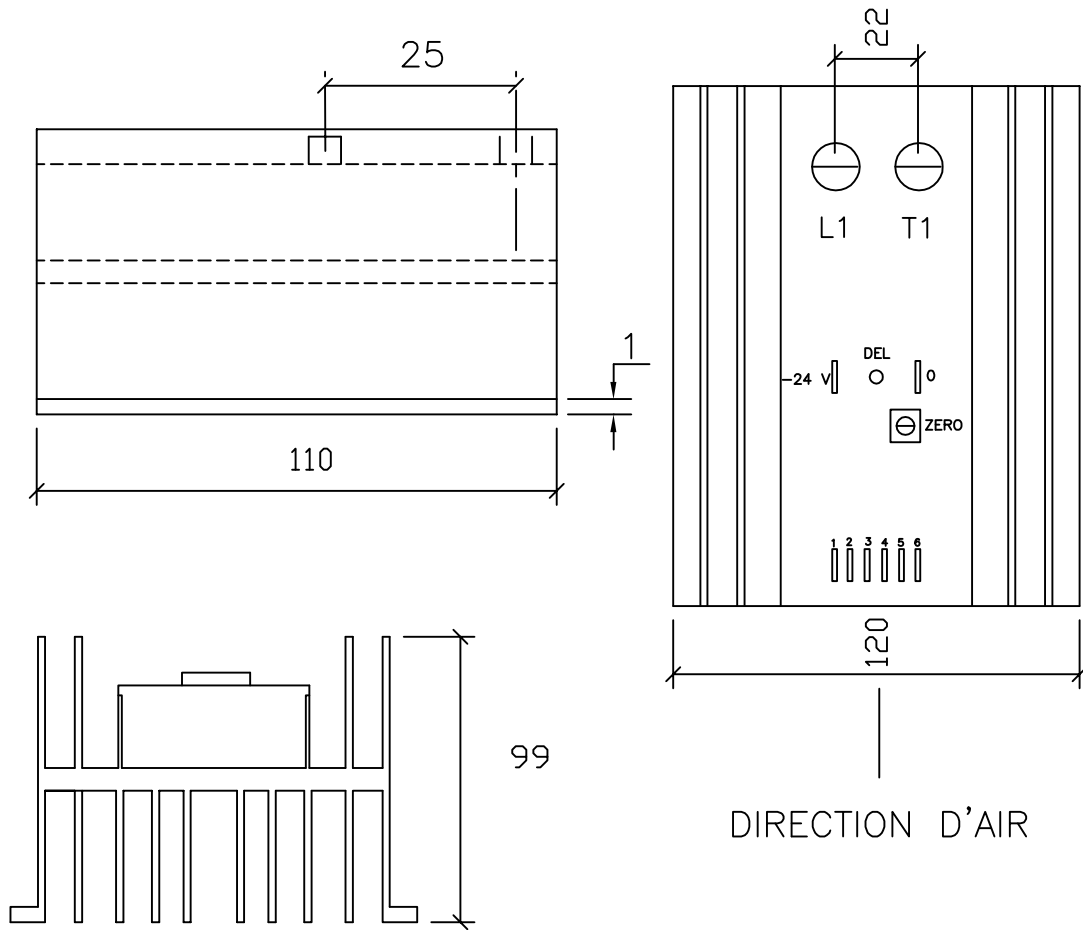


TOUTES LES DIMENSIONS SE LISENT EN mm.



(VOIR SCHEMA DE CONTROLÉ POUR IDENTIFICATION DES RACCORDS)

L1=Ligne/line  
T1=Charge/Load

MODULE PUISSANCE TYPE MCR225  
PAR MOTOROLA  
RADIATEUR TYPE MS-15170  
PROTECTION SURCHAUFFAGE INTEGREE  
ALIMENTATION 24 VAC EXTERIEURE  
CONTROLÉ MODULANT  
MODELE: CCS 15-1  
COURANT: 15A  
VOLTAGE: 48 @ 347 VAC 1 PHASE  
AVEC ZERO-CROSSING



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UL Std No. 508  
-INDUSTRIAL CONTROL EQUIPMENT

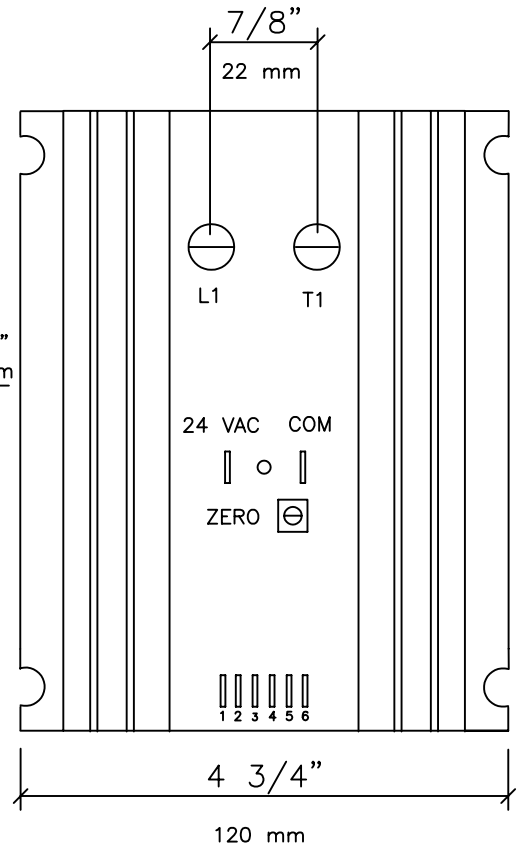
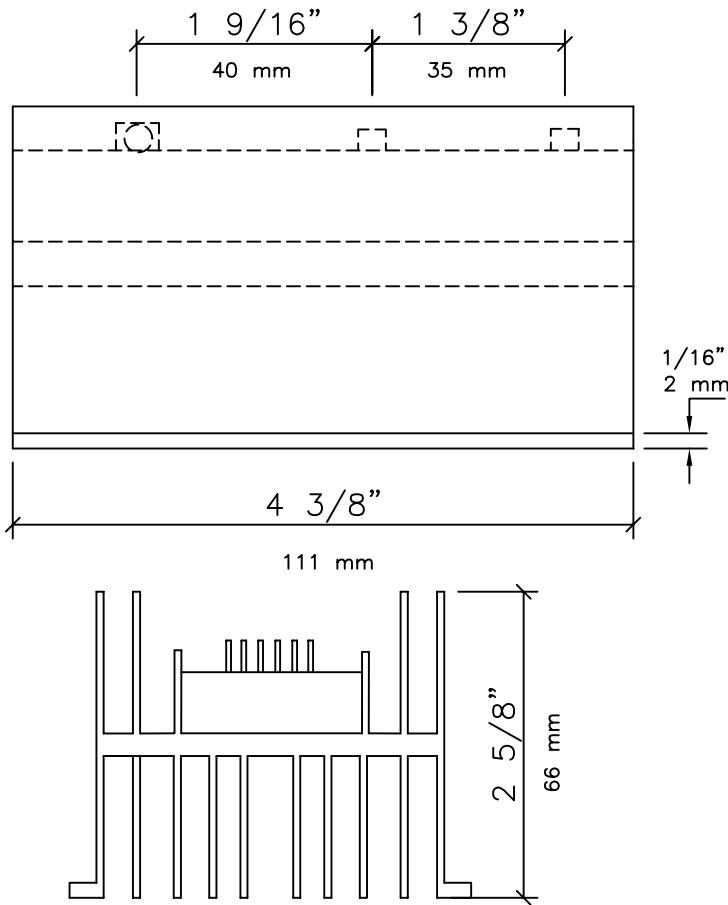
- PROPOSITION
- APPROVAL
- INFORMATION

DRAWING NAME :

CCS 15-1  
347 VAC

DATE :

JAN 2004



DIRECTION D'AIR  
AIR FLOW

MODULE PUISSANCE TYPE SCR / POWER MODULE TYPE SCR

RADIATEUR TYPE MS-15170 / HEATSINK TYPE MS-15170

PROTECTION SURCHAUFFAGE INTÉGRÉE / INTEGRATED OVERHEAT PROTECTION

ALIMENTATION 24 VAC EXTÉRIEURE / 24 VAC EXTERNAL POWER SUPPLY

CONTROLE MODULANT / MODULATING CONTROL

MODÈLE / MODEL: CCS-15-1

COURANT: 15A / AMPERAGE: 15A

VOLTAGE: 48 @ 600 VAC 1 PHASE

ZERO-CROSSING

(VOIR SCHEMA DE CONTROLE POUR LE BRANCHEMENT / SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)

L1=LIGNE / LINE  
T1=CHARGE / LOAD



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-APPAREILLAGE INDUSTRIEL DE COMMANDE  
UL Std No. 508  
-INDUSTRIAL CONTROL EQUIPMENT

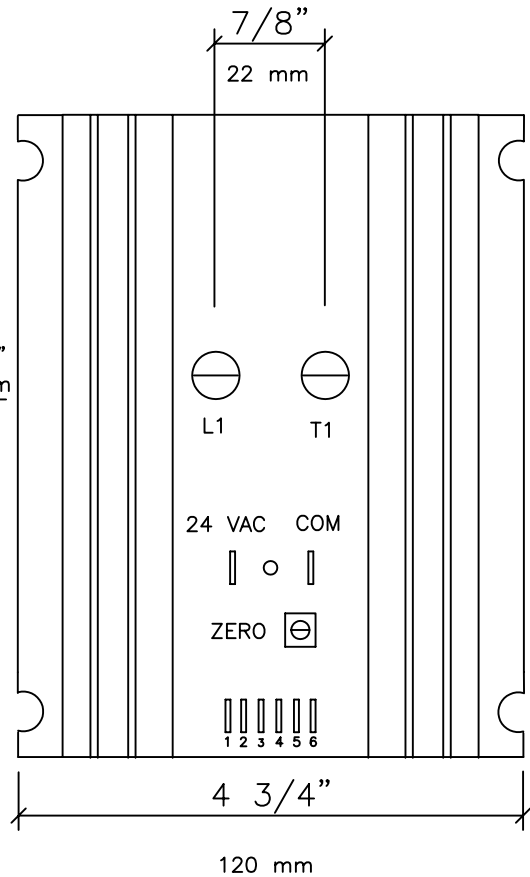
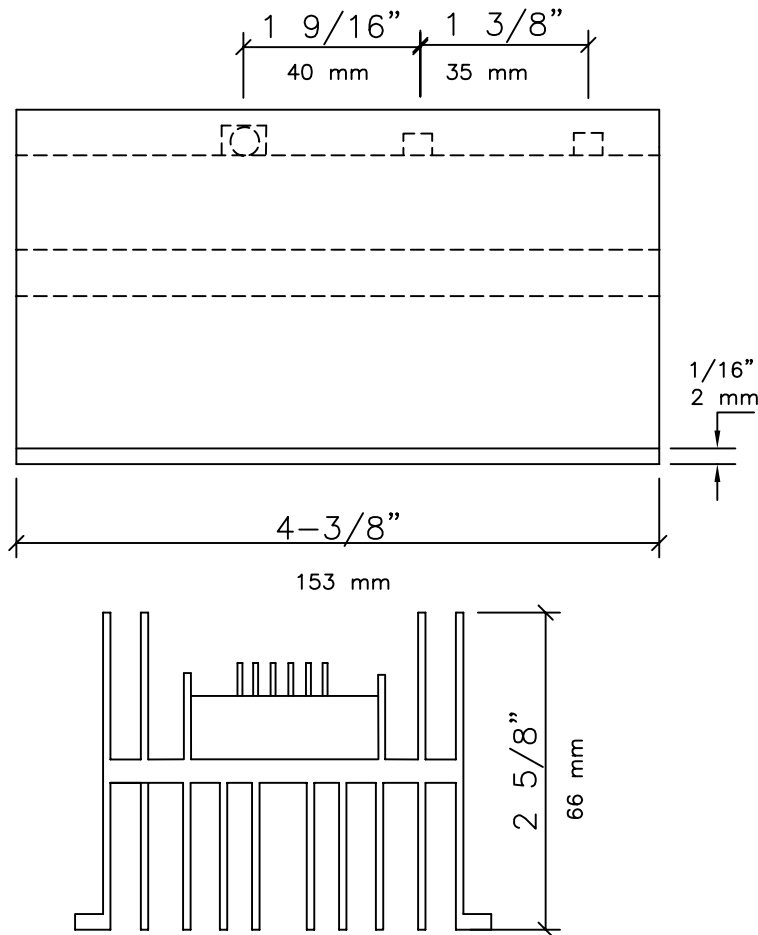
- PROPOSITION
- APPROVAL
- INFORMATION

DRAWING NAME :

CCS-15-1

DATE :

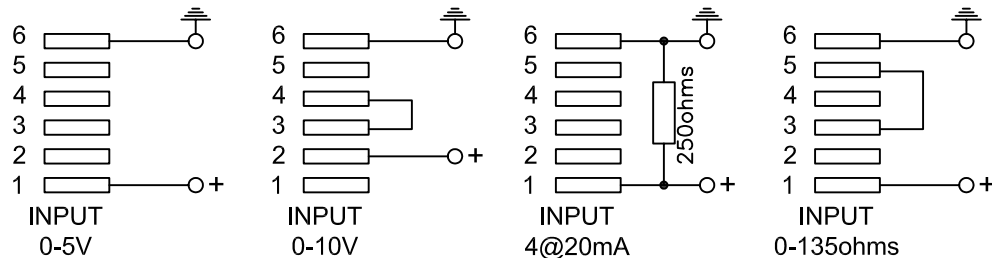
AOÛT / AUGUST 2004



DIRECTION D'AIR  
AIR FLOW

MODULE PUISSANCE TYPE SCR / POWER MODULE TYPE SCR  
 RADIATEUR TYPE MS-15170 / HEATSINK TYPE MS-15170  
 PROTECTION SURCHAUFFAGE INTEGREE / INTEGRAL OVERHEAT PROTECTION  
 ALIMENTATION 24 VAC EXTERIEURE / 24 VAC EXTERNAL POWER SUPPLY  
 CONTROLE MODULANT / MODULATING CONTROL  
 MODÈLE: CCS 30-1 / MODEL: CCS 30-1  
 COURANT: 30A / AMPERAGE: 30A  
 VOLTAGE: 48 @ 600 VAC 1 PHASE  
 ZERO-CROSSING

ACCEPTÉ DIFFÉRENTS SIGNAUX DE CONTRÔLE / ACCEPTS DIFFERENT CONTROL SIGNALS : 0-5V, 0-10V, 4@20mA, 0-135ohms  
 (VOIR SCHEMA DE CONTROLE POUR LE BRANCHEMENT / SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)



L1=LIGNE / LINE  
T1=CHARGE / LOAD



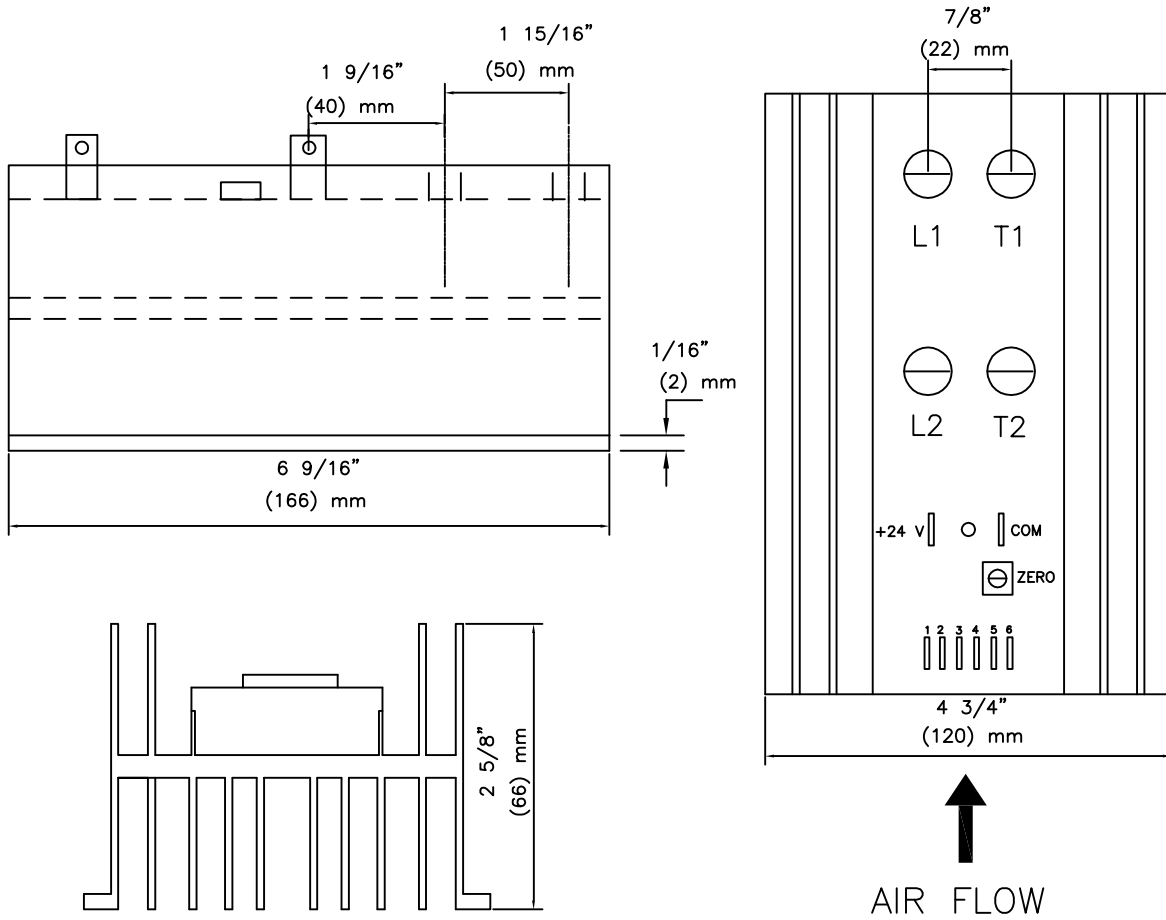
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- PROPOSITION
- APPROVAL
- INFORMATION

DRAWING NAME :  
CCS 30-1  
DATE :  
JAN 2004

ALL DIMENSIONS ARE IN INCHES (mm) / TOUTES LES DIMENSIONS SONT EN POUCE (mm)



POWER MODULE TYPE BTW69-1200 / MODULE DE PUISSANCE TYPE BTW69-1200

HEATSINK TYPE MS-15170 / RADIATEUR IR TYPE MS-15170

INTEGRAL OVERHEAT PROTECTION / PROTECTION DE SURCHAUFFAGE INTÉGRÉE

24 VAC POWER SUPPLY / ALIMENTATION 24 VAC EXTÉRIEURE

MODULATING CONTROL / CONTRÔLE MODULANT

INPUT SIGNAL / SIGNAL D'ENTRÉE (4-20mA, 0-5Vdc, 0-10Vdc, 0-135.Ω)

MODEL: CCS 30-3 / MODÈLE CCS-30-3

AMPERAGE: 30A / COURANT 30A

VOLTAGE: 48 @ 600 VAC 3 PHASE

WITH ZERO-CROSSING

SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS / VOIR SCHÉMA DE CONTRÔLE POUR LE BRANCHEMENT



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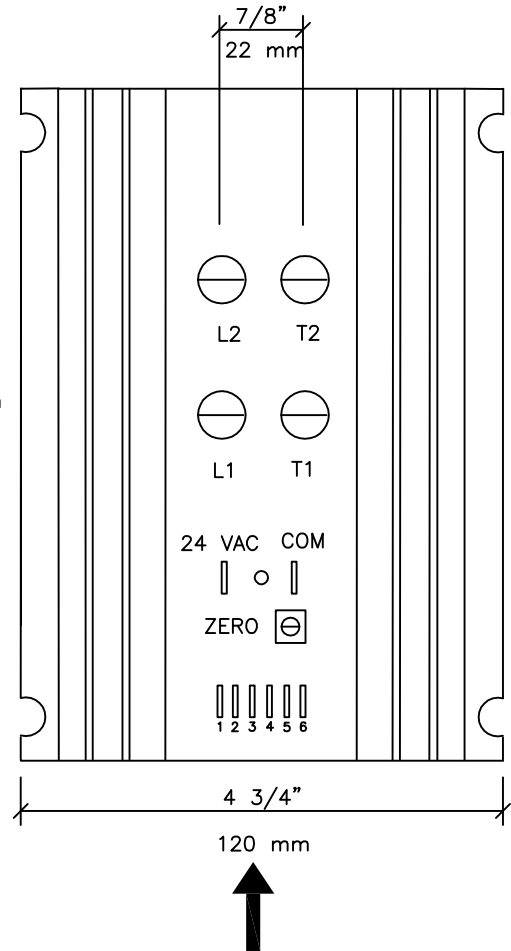
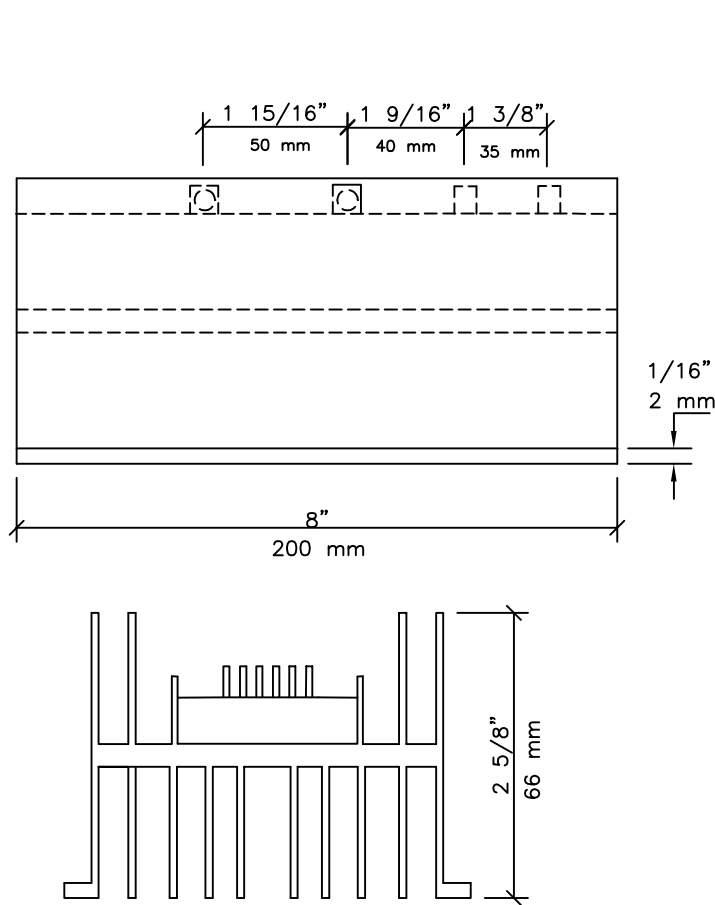
- PROPOSITION
- APPROVAL
- INFORMATION

DRAWING NAME :

CCS 30-3

DATE :

JAN 2004



DIRECTION D'AIR  
AIR FLOW

MODULE PUISSANCE TYPE SCR / POWER MODULE TYPE SCR  
 RADIATEUR TYPE MS-15170 / HEATSINK TYPE MS-15170  
 PROTECTION SURCHAUFFAGE INTEGREE / INTEGRAL OVERHEAT PROTECTION  
 ALIMENTATION 24 VAC EXTERIEURE / 24 VAC EXTERNAL POWER SUPPLY  
 CONTROLE MODULANT / MODULATING CONTROL  
 MODÈLE: CCS 40-3 / MODEL CCS 40-3  
 COURANT: 40A / AMPERAGE: 40A  
 VOLTAGE: 48 @ 600 VAC 3 PHASES  
 ZERO-CROSSING  
 (VOIR SCHEMA DE CONTROLE POUR LE BRANCHEMENT / SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)

L1=LIGNE / LINE  
T1=CHARGE / LOAD



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 -INDUSTRIAL CONTROL EQUIPMENT

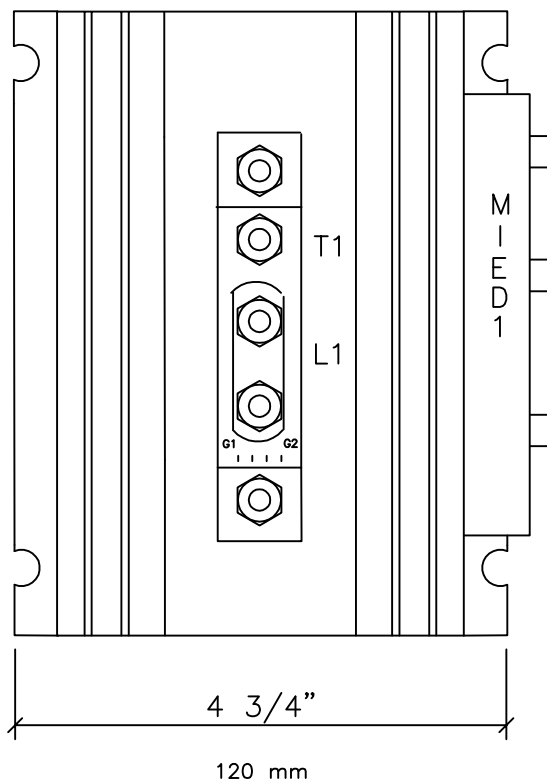
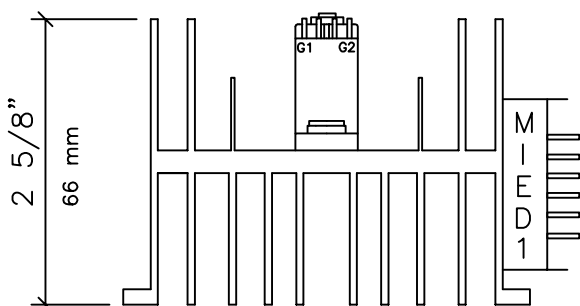
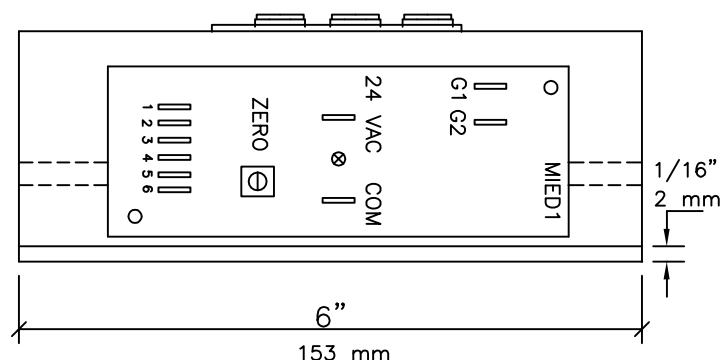
- PROPOSITION
- APPROVAL
- INFORMATION

DRAWING NAME :

CCS-40-3

DATE :

JAN 2004



DIRECTION D'AIR  
AIR FLOW

MODULE PUISSANCE / POWER MODULE: THYRISTORS

RADIATEUR IR TYPE MS-15170 / HEATSINK TYPE MS-15170

PROTECTION SURCHAUFFAGE INTEGREE / INTEGRAL OVERHEAT PROTECTION

ALIMENTATION 24 VAC EXTERIEURE / 24 VAC EXTERNAL POWER SUPPLY

CONTROLE MODULANT / MODULATING CONTROL

MODELE / MODEL: CCS-50-1 ET/AND CCS-75-1

COURANT: 50 ET 75A / AMPERAGE: 50 AND 75A

VOLTAGE: 48 @ 600 VAC 1 PHASE

ZERO-CROSSING

(VOIR SCHEMA DE CONTROLE POUR LE BRANCHEMENT / SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)

L1=LIGNE/ LINE  
T1=CHARGE / LOAD



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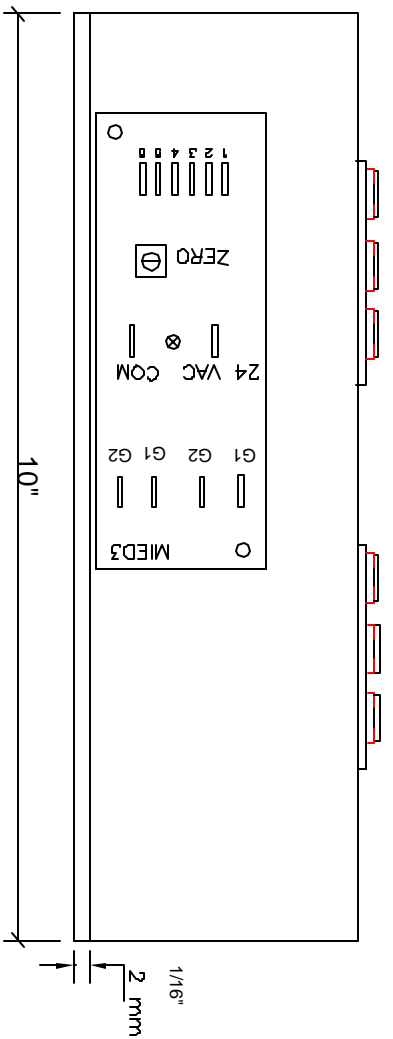
- PROPOSITION
- APPROVAL
- INFORMATION

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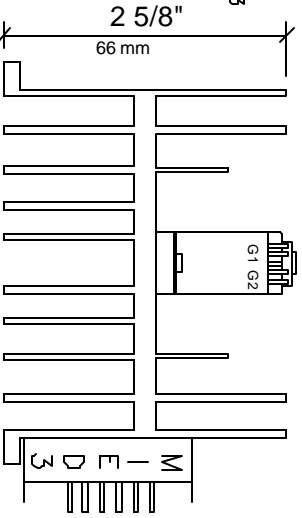
CCS-50-1  
CCS-75-1

DATE :

JAN 2004

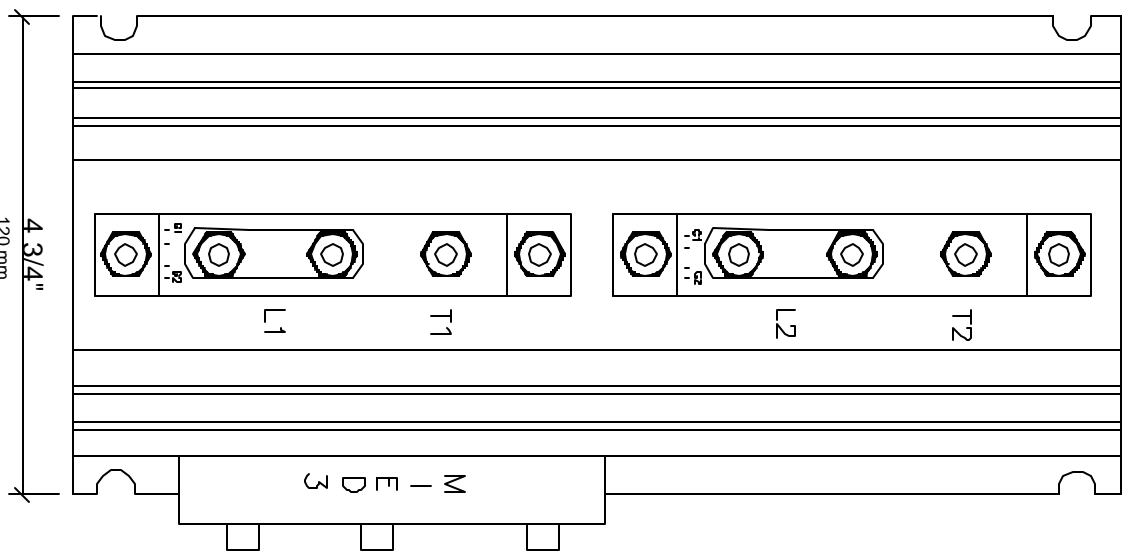


MODULE PUISSANCE / POWER MODULE: TYPE(2) THYRISTORS  
 RADIATEUR IR / HEATSINK: TYPE MS-15170  
 CONTROLE MODULANT / MODULATING CONTROL  
 MODELE / MODEL: CCS-50-3 ET/AND CCS-75-3  
 COURANT / AMPERAGE: 50A ET/AND 75A  
 VOLTAGE: 48 @ 600 VAC 3 PHASE  
 ZERO-CROSSING



PROTECTION SURCHAUFFAGE INTEGREE / INTEGRAL OVERHEAT PROTECTION  
 ALIMENTATION 24 VAC EXTERIEURE / 24 VAC EXTERNAL POWER SUPPLY  
 (VOIR SCHEMA DE CONTROLE POUR LE BRANCHEMENT)  
 (SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)

L1=L2=LIGNE / LINE  
 T1=T2=CHARGE / LOAD



DIRECTION D'AIR / AIR FLOW

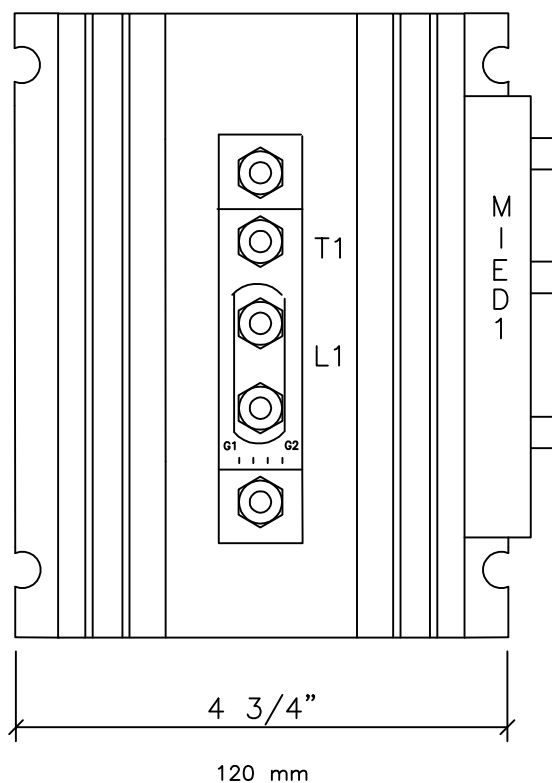
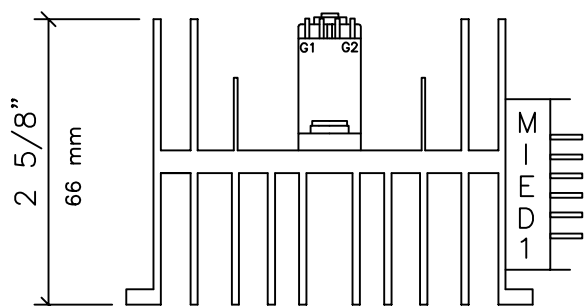
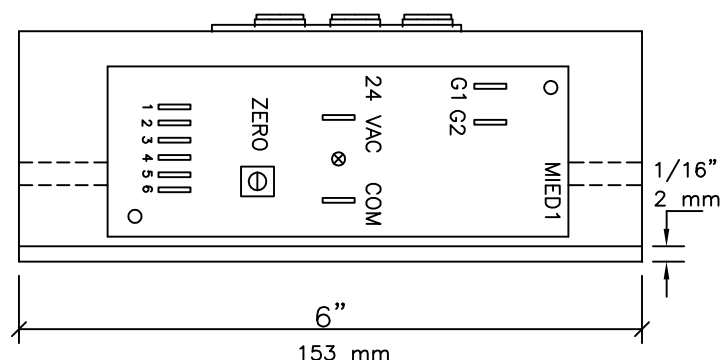


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 APPAREILS INDUSTRIEL DE COMMERCIAL  
 UL Std No. 508  
 INDUSTRIAL CONTROL EQUIPMENT

PROPOSITION  
 APPROVAL  
 INFORMATION

DRAWING NAME:  
 CCS-50-3  
 CCS-75-3  
 DATE:  
 JAN 2004



MODULE PUISSANCE / POWER MODULE: THYRISTORS

RADIATEUR IR TYPE MS-15170 / HEATSINK TYPE MS-15170

PROTECTION SURCHAUFFAGE INTEGREE / INTEGRAL OVERHEAT PROTECTION

ALIMENTATION 24 VAC EXTERIEURE / 24 VAC EXTERNAL POWER SUPPLY

CONTROLE MODULANT / MODULATING CONTROL

MODÈLE / MODEL: CCS-90-1

COURANT: 90A / AMPERAGE: 90A

VOLTAGE: 48 @ 600 VAC 1 PHASE

ZERO-CROSSING

(VOIR SCHEMA DE CONTROLE POUR LE BRANCHEMENT / SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)

  
 DIRECTION D'AIR  
 AIR FLOW

L1=LIGNE/ LINE  
 T1=CHARGE / LOAD



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 UL Std No. 508  
 -INDUSTRIAL CONTROL EQUIPMENT

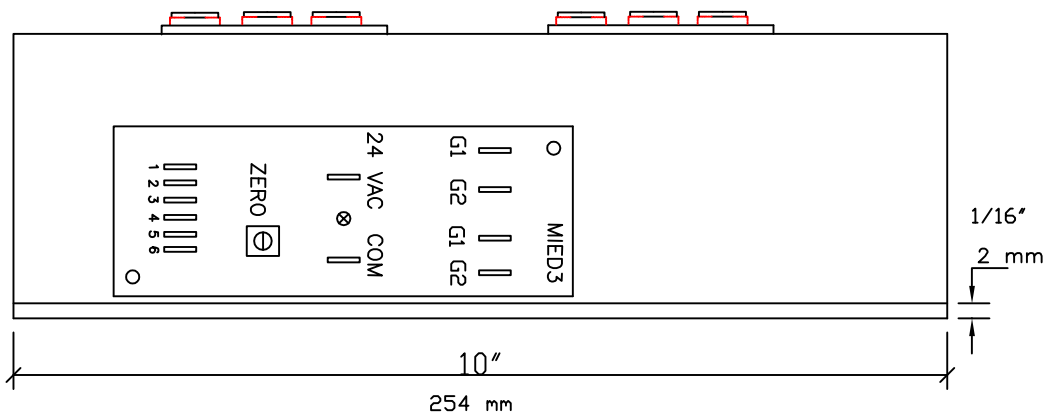
- PROPOSITION
- APPROVAL
- INFORMATION

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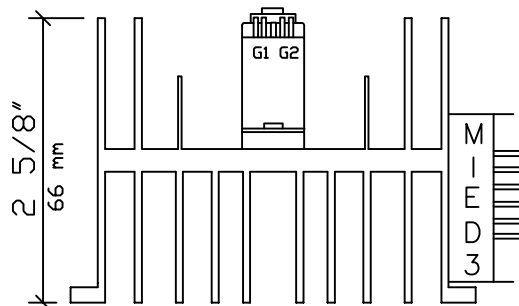
CCS 90-1

DATE :

JAN 2004

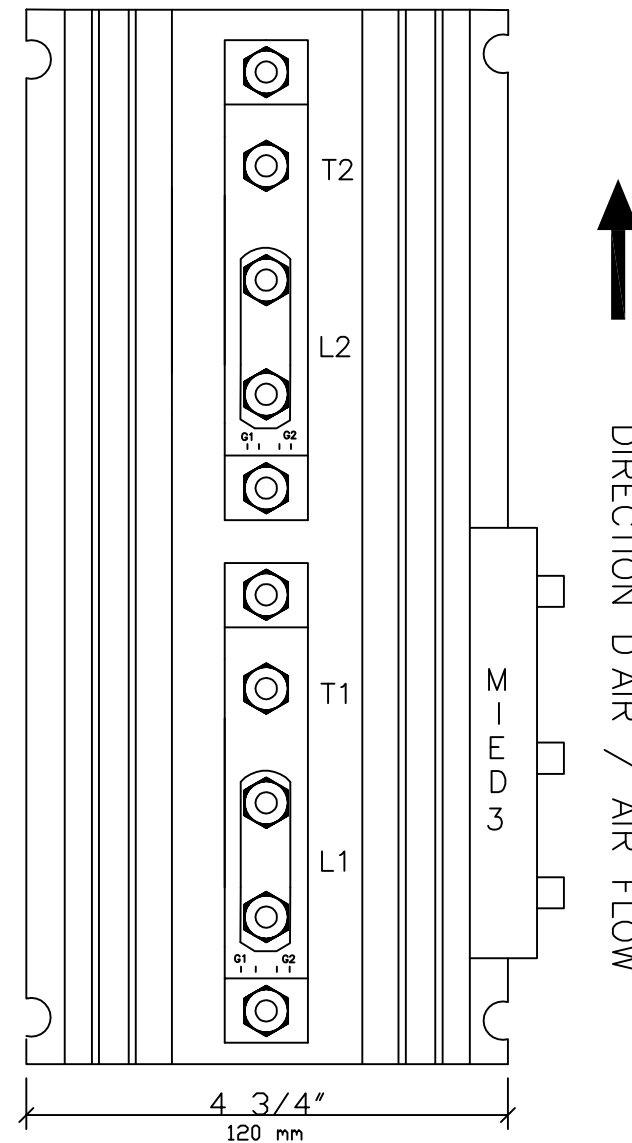


MODULE PUISSANCE / POWER MODULE: TYPE(2) THYRISTORS  
 RADIATEUR IR / HEATSINK: TYPE MS-15170  
 CONTROLE MODULANT / MODULATING CONTROL  
 MODÈLE / MODEL: CCS-90-3  
 COURANT/ AMPERAGE: 90A  
 VOLTAGE: 48 @ 600 VAC 3 PHASE  
 ZERO-CROSSING



PROTECTION SURCHAUFFAGE INTEGREE / INTEGRAL OVERHEAT PROTECTION  
 ALIMENTATION 24 VAC EXTERIEURE / 24 VAC EXTERNAL POWER SUPPLY  
 (VOIR SCHÉMA DE CONTROLE POUR LE BRANCHEMENT)  
 (SEE CONTROL SCHEMATIC FOR CONTROLS CONNECTIONS)

L1=L2=LIGNE / LINE  
 T1=T2=CHARGE / LOAD



DIRECTION D'AIR / AIR FLOW



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 UL Std No. 508  
 -INDUSTRIAL CONTROL EQUIPMENT

- PROPOSITION
- APPROVAL
- INFORMATION

DRAWING NAME :  
 CCS 90-3

DATE :  
 JAN 2004