



File E124534  
Project 97NK18908

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REPORT

on

POWER CONVERSION EQUIPMENT

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New Berlin, WI

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## DESCRIPTION

## PRODUCT COVERED:

\*AC adjustable speed drives, open type, Models ACS followed by 101 or 103, followed by -K18, -K25, -K37, -K75, -1K1, -1K6, -2K1, -2K7 or -4K1, -H18, -H25, -H37, -H75, 1H1 or 1H6 followed by -1, may be followed by U.

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

General - These open type AC inverters convert single or 3-phase, 50/60 Hz input power to an adjustable AC frequency and voltage source for controlling the speed of AC induction motors. The output voltage varies proportionally with the output frequency to maintain a constant excitation value from 0 to 250 Hz. The drive includes power conversion components, power and control logic devices and regulator circuitry. The microprocessor is used to control the gate drivers and power semiconductors which generate a pulse width modulated (PWM) output waveform.

Spacings - Spacings were evaluated using UL 508C, Tables 35.1 and 35.4. UL 840 spacing requirements were applied per Tables 5.1 and 6.2 for circuit boards.

## RATINGS:

*Model	Input Voltage (V ac)	Input Current (A)	Output Voltage (V ac)	Output Current (Single Phase) (A)	Output kW
ACS101-X18-1	200-240	2.7	0-Vin	1.0	0.12
ACS101-X25-1	200-240	4.4	0-Vin	1.4	0.18
ACS101-X37-1	200-240	5.4	0-Vin	1.7	0.25
ACS101-X75-1	200-240	6.9	0-Vin	2.2	0.37
ACS101-1X1-1	200-240	9.0	0-Vin	3.0	0.55
ACS101-1X6-1	200-240	10.8	0-Vin	4.3	0.75
ACS101-2X1-1	200-240	14.8	0-Vin	5.9	1.1
ACS101-2X7-1	200-240	18.2	0-Vin	7.0	1.5
ACS101-4X1-1	200-240	22	0-Vin	9.0	2.2

\*\*"X" in the model number can be K or H.

<u>*Model</u>	<u>Input Voltage (V ac)</u>	<u>Input Current (A)</u>	<u>Output Voltage (V ac)</u>	<u>Output Current (3-Phase) (A)</u>	<u>Output kW</u>
ACS103-X75-1	200-240	3.2	0-Vin	2.2	0.37
ACS103-1X1-1	200-240	4.2	0-Vin	3.0	0.55
ACS103-1X6-1	200-240	5.3	0-Vin	4.3	0.75
ACS103-2X1-1	200-240	7.2	0-Vin	5.9	1.1
ACS103-2X7-1	200-240	8.9	0-Vin	7.0	1.5
ACS103-4X1-1	200-240	12.0	0-Vin	9.0	2.2

\*"X" in the model number cab be K or H.

NOMENCLATURE:

The products are described as follows:

$\frac{A}{I} \frac{CS}{II} \frac{10}{III} \frac{1}{IV} - \frac{K75}{V} - \frac{1}{VI}$

I - AC Drive

II - Product Type

CS - Standard

III - ACS 100 Product Family

IV - Number of Input Phases

1 - Single phase input

3 - Three phase input

\*V - Rated Output Power in kVA

K18 - 0.18 kVA H18 - 0.18 kVA

K25 - 0.25 kVA H25 - 0.25 kVA

K37 - 0.37 kVA H37 - 0.37 kVA

K75 - 0.75 kVA H75 - 0.75 kVA

1K1 - 1.1 kVA 1H1 - 1.1 kVA

1K6 - 1.6 kVA 1H6 - 1.6 kVA

2K1 - 2.1 kVA

2K7 - 2.7 kVA

4K1 - 4.1 kVA

VI - Supply Voltage

1 - 200-240 V ac