

USER MANUAL TABLE OF CONTENTS

Contents of This User Manual	
IronHorse General Purpose AC Motors User Manual	<u>CF-1</u>
WARNINGS	W-1
~ WARNING ~	
Trademarks	
~ AVERTISSEMENT ~	W-2
Marques de commerce	
USER MANUAL REVISION HISTORY	<u>H−1</u>
IRONHORSE GENERAL PURPOSE AC MOTORS USER MANUAL TABLE OF CONTENTS	<u>TOC−1</u>
CHAPTER 1: GETTING STARTED	<u>1-1</u>
Manual Overview	1-2
Overview of this Publication	
Who Should Read This Manual	1-2
Technical Support	
Special Symbols	
Available Models	1-3
MTF2 Conveyor/Farm-Duty T-Frame Single-Phase Motors – Features and Specifi	
MTR2 Rolled-Steel 56C/56HC-Frame Single-Phase Motors – Features and Specia	
MTRJ Centrifugal Jet Pump One-Phase Motors – Features and Specifications	
MTDP Open Drip-Proof AC Three-Phase Motors – Features and Specifications MTR2 and MTRP Rolled-Steel 56C/56HC-Frame Three-Phase Motors – Features a	
Specifications	
MTRJ Centrifugal Jet Pump Three-Phase Motors – Features and Specifications	
MTCP2 Premium-Efficiency Cast-Iron Three-Phase Motors – Features and Specific	
Receiving and Inspection	1-26
Unpacking	
IronHorse® Part Number Explanation	1-26
Reshipping	
Long Term Storage	1-27
Warranty	1-27
CHAPTER 2: MOUNTING AND INITIAL STARTUP	<u>2-1</u>
Safety Information	2-2
Danger!	2-2
Wiring Notes: PLEASE READ PRIOR TO INSTALLATION.	2-2
	2-2
Motor Dimensions	2-3
(Dimensions = inches)	2-3

MTF2 T-Frame Single-phase Farm-Duty Motor Dimensions	2-3
MTR2 56(H)C-Frame Single-phase Rolled-steel Motor Dimensions	
MTR2 56C-Frame Three-phase Rolled-steel Motor Dimensions	
MTRP 56HC-Frame Three-phase Rolled-steel Motor Dimensions	
MTDP Open Drip-Proof Three-phase Rolled-steel Motor Dimensions	2-6
MTCP2 Premium-Efficiency T-Frame Three-Phase Motor Dimensions	2-7
MTCP2 Premium-Efficiency TC-Frame Three-Phase Motor Dimensions	2-11
Terminal and Wiring Diagrams	2-13
IronHorse® Single-Phase Motors	
IronHorse® Three-Phase Motors	2-14
Single-Phase Motors Reversing Diagrams	2-16
Motor Mounting	2-18
General Mounting Information	2-18
Motor Mounting Orientation	2-18
Proper Installation Conditions	2-19
Coupling Alignment	2-19
Motor Nameplate & Starter Information	2-20
Typical IronHorse® Motor Nameplate	
Motor Starter Information	2-20
Locked Rotor Amps	2-20
Inspection Before Startup	2-21
Initial Startup Inspection	2-21
CHAPTER 3: MAINTENANCE	<u>3-1</u>
Routine Maintenance	3-2
Bearing Size Information	
CHAPTER 4: ACCESSORIES	4-1
Replacement Parts	4-2
Junction boxes, c-flanges, Drive Bells, and Current Diverter Rings for IronHorse® Drip-Proof Three-Phase Motors	
Capacitors and Centrifugal Switches for IronHorse® Single-Phase Motors	
Spare/Replacement Parts for MTF2 Single-Phase Farm-Duty Motors	
Spare/Replacement Parts for MTR2/MTRJ Single-Phase Motors	
Spare/Replacement Parts for MTR2/MTRP/MTRJ Three-Phase Motors	
Spare/Replacement Parts for MTCP2 Premium-Efficiency Three-Phase Motors	4-8
C-Flange Kits	4-10
C-Flange Kits for MTCP2 Premium-Efficiency Three-Phase Motors	4-10
STABLE™ Slide Bases	
Slide Base Selection	
Slide Base Dimensions	
CHAPTER 5: REFERENCE INFORMATION	5-1
Using IronHorse® Motors with AC Drives	
Voltage Spike Considerations for AC Drive Control	
Radial Overhung Load	
F1 and F2 Mounting	
Junction Box Dimensions	
Minimum Sheave Diameters	
Decihel Levels	5 / 5-8



Shipping Crate Dimensions	5-10
Performance Curves for MTF2 Motors	
Performance Curves for MTR2 Motors	
Performance Curves for MTDP Motors	
Performance Curves for MTRP Motors	
Speed/Torque Curves for MTCP2 Motors (1800 RPM)	
Speed/Torque Curves for MTCP2 Motors (1200 RPM)	
Speed/Torque Curves for MTCP2 Motors (3600 RPM)	
CHAPTER 6: LEGACY MOTORS	
Chapter Overview	
MTCP Series Motors	6-3
MTCP Features and Specifications	
MTCP Specifications	
MTCP Motor Performance Data	
MTCP Motor Dimensions	
MTCP Junction Box Dimensions	
MTCP Decibel Levels	
Spare/Replacement Parts for MTCP Premium-Efficiency Three-Phase Motors	
MTCP Bearing Size Information	
MTR Series Motors	6-21
MTR Features and Specifications (Single-Phase Motors)	
MTR Features and Specifications (Three-Phase Motors)	
MTR Motor Dimensions	6-24
MTR Junction Box Dimensions	6-25
MTR Terminal and Wiring Diagrams	
MTR Motors Decibel Levels	
Spare/Replacement Parts for MTR Single-Phase Motors	
MTR Bearing Size Information	
MTSS Series Motors	
MTSS Features and Specifications	6-27
MTSS Motor Dimensions	6-29
MTSS Junction Box Dimensions	
MTSS Decibel Levels	
MTSS Motor Mounting	
Spare/Replacement Parts for MTSS Stainless-Steel Three-Phase Motors	
MTSS Bearing Size Information	6-32
MTC EPAct Series Motors	6-33
MTC Features and Specifications	6-33
MTC Motor Dimensions	6-41
MTC Junction Box Dimensions	6-46
MTC Motors Decibel Levels	6-47
C-Flange Kits for MTC EPAct Three-Phase Motors	
MTC Motors Bearing Size Information	6-49
MTF Farm-Duty T-Frame Single-Phase Motors – Features and Specifications	6-50
Motor Dimensions	6-51
MTF T-Frame Single-phase Farm-Duty Motor Dimensions	6-51
Terminal and Wiring Diagrams	6-51
Replacement Parts	

Table of Contents



Capacitors and Centrifugal Switches for IronHorse® Single-Phase MotorsSpare/Replacement Parts for MTF Single-Phase Farm-Duty Motors	6-52	
	6-52	
Junction Box Dimensions	6-53	