**LIST OF ABBREVIATIONS**

PLC = Programmable Logic Controller

INVT = IVC Series, Output (Transistor Type)

DC = Direct Current

AC = Alternating Current

CNC = Computer Numerically Controlled

MRP = Material Requirement Planning

PV = Process Variable

FCE = Final Control Element

DCS = Distributed Control System

SCADA = Supervisory Control and Data Acquisition

CPU = Central Processing Unit

I/O = Input / Output

LD = Ladder Diagram

SFC = Sequential Function Chart

FBD = Function Block Diagram

ST = Structure Text

TB = Time Bases

GUI = Graphic User Interface

HMI = Human-Machine Interface

IC = Integrated Circuit

MRL = Machine-Room-Less

UI = User Interface

MOSFET = Metal-Oxide-Semiconductor Field-Effect Transistor

CW = Clockwise

CCW = Counterclockwise

SPST = Single Pole Single Throw

SPDT = Single Pole Double Throw

DPST = Double Pole Single Throw

LCD = Liquid Crystal Display

LED = Light Emitting Diode

EMF = Electromotive Force

N = Speed of the motor

Eb = Back electromotive force

V = Supply voltage

Ia = Armature current

Ra = Armature resistance

Rc = Controller resistance

G = Rotational inductance constant

L = Length of the elevator

W = Width of the elevator

H = Height of the elevator

V = Volume of the elevator

F = Force acting on the rope

m = Total of maximum weight of elevator

g = Acceleration due to gravity on the earth’s surface

P = Power of the entire elevator

W = Work done

V = Velocity of the elevator

Hp = Horse power

Ω = Rotational speed

Τ = Torque of the motor