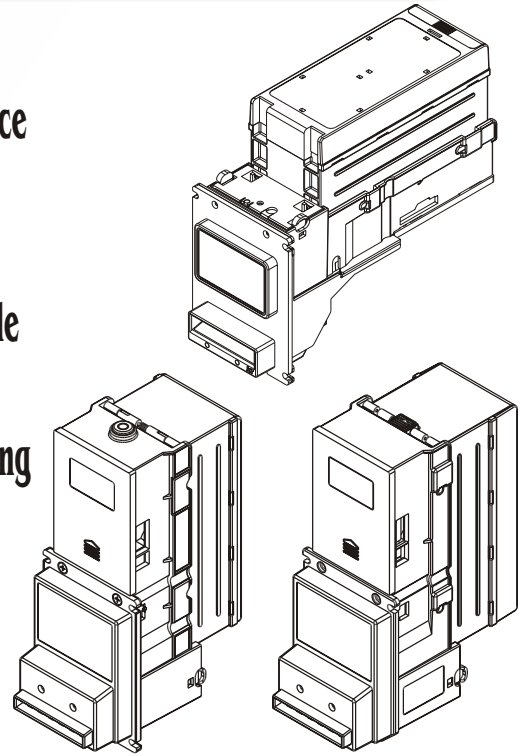
Bill Validator

A6&V6 Series
Installation Guide

- 4 - Way Acceptance
- Low Maintenance
- Easy Installation
- Re - Programmable Flash ROM
- Auto Self -Adjusting Sensor System



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Vol. 7.0 Part Number : H4458F

Contents

(1) A6/V6 Bill Validator Specifications

Acceptance Rate

96% or greater

Bill insertion

4-way Acceptance

Acceptance Speed

Approx. 3 seconds, Pulse Interface
(including bill stacking)

Interfaces

S.T. D. Pulse
M.D.B. (Multi-Drop Bus)
ICT Protocol

Bill box Capacity

Approx. 300 bills (200~300) *3M-SBX03005*
500 bills (300~500) *3M-SBX04005*
800 bills (750~850) *3M-SBX08005*

Weight

Approx. 2kg (shipping)

Power Sources

34V DC 1.5Amp (M.D.B)
12V DC 3 Amp
117V AC 0.2Amp (60HZ)
24V AC 1.5Amp (60HZ)

Power Consumption

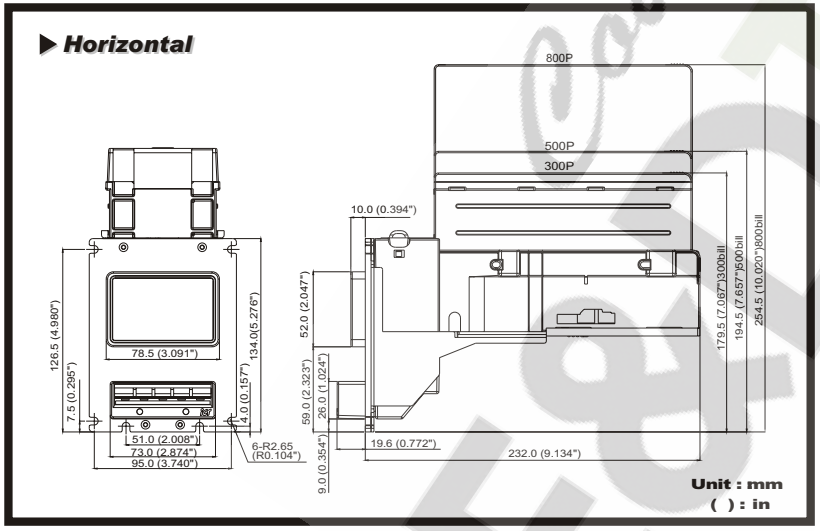
Max 50 watts

Environment Range

Operating Temperature 0°C~55°C
Storage Temperature -30°C~70°C
Humidity：30%~85% RH (no condensation)

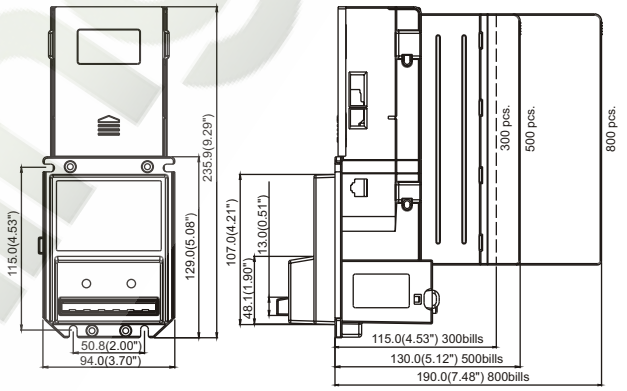
◈ **This guide contains all A6/V6 specs, but the actual machine matches only one of the specs.**

(2) Bill Validator Dimensions



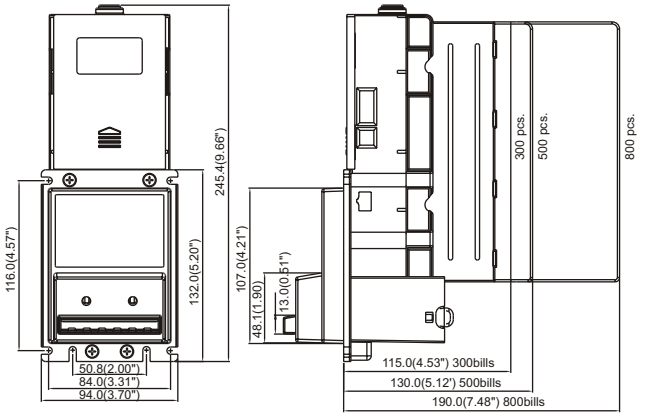
▶ ***Vertical***

(Sliding Block)



Unit : mm
( ) : in

(Push Button)



Unit : mm
( ) : in

(3) LED Display

The two LED lights located at the front of the unit will show the operational status of the bill validator. The LED lights will flash ON and OFF (in 500ms intervals) when the unit is ready to accept bills. The LED lights will be OFF if the unit is disabled or out of service, in which case the unit will not accept any bills.

The bill validator can only accept one bill at a time. The LED lights will be OFF and will not accept another bill while a bill is being validated in the unit. The LED lights will start to flash normally when the bill validator is ready to accept the next bill.

(4) LED Status

FLASHES	STATUS
1	bill jammed
2	disabled from system
3	sensor problem
4	reserved
5	bill box is removed
6	bill box is full of money
LED ON	POWER ON
LED OFF	POWER OFF

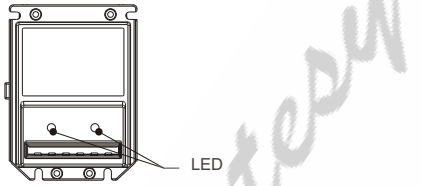
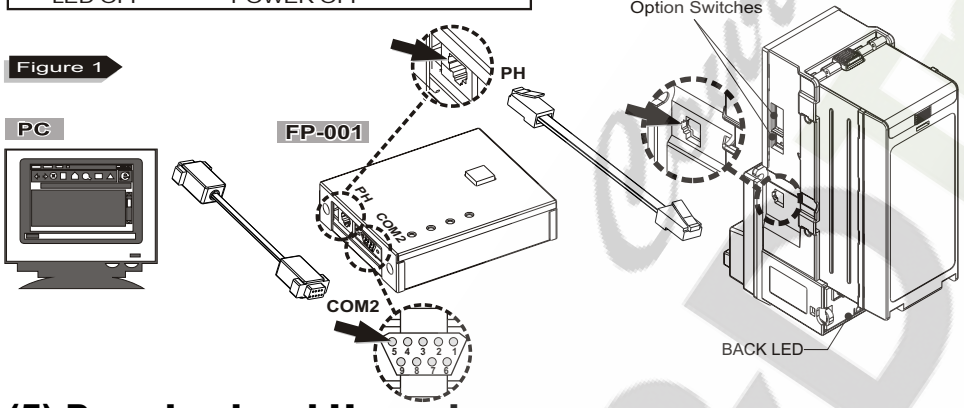


Figure 1



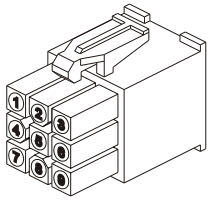
(5) Download and Upgrade

In addition to the 30-pin connector, there is also an 8-pin RJ-45 connector on the side of the bill validator designed for the purpose of downloading programs and updating validation software. The connector will be kept open under normal operation of the bill validator. It will only be used when a new software or program need to be downloaded into the flash ROM. (Figure 1)

(6) Pin-out Assignments (A6, Pulse for 12V DC)

For the *12V DC* version of the A6 bill validator, the harness(*part no. WEL-M007*, see page.11 for pin-out information) has a dual-in-line 30-pin peripheral connector at one end and a 9-pin mating connector at the other end. Connect the 30-pin connector to the side of the bill validator and the 9-pin mating connector to the 12V DC power harness (*part no.CU-961-1*, see page. 9 for pin-out information).

◈ **9-pin mating connector pin-out assignments:**



Pin 1 INHIBIT + **Pin 6 Reserved**
Pin 2 INHIBIT - **Pin 7 CREDIT_RELAY(N.O.)**
Pin 3 Reserved **Pin 8 CREDIT_RELAY(Common)**
Pin 4 Reserved **Pin 9 GND (Power)**
Pin 5 12V DC (Power)

◈ **Dual-in-line 30-pin peripheral connector (A6, 12V DC) pin-out assignments:**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Pin 1 - CREDIT_RELAY(Common)
Pin 2 - 12VDC (Power)
Pin 3 - ENABLE -
Pin 4 - Reserved
Pin 5 - INHIBIT +
Pin 6 - KEY
Pin 7 - Reserved
Pin 8 - Reserved
Pin 9 - Reserved
Pin 10 - GND (Power)
Pin 11 - Reserved
Pin 12 - Reserved
Pin 13 - Reserved
Pin 14 - Reserved
Pin 15 - Reserved

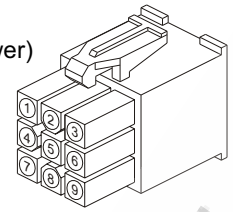
Pin 16 - CREDIT_RELAY(N.O.)
Pin 17 - Reserved
Pin 18 - ENABLE +
Pin 19 - KEY
Pin 20 - INHIBIT -
Pin 21 - Reserved
Pin 22 - Reserved
Pin 23 - Reserved
Pin 24 - Reserved
Pin 25 - Reserved
Pin 26 - Reserved
Pin 27 - Reserved
Pin 28 - Reserved
Pin 29 - Reserved
Pin 30 - Reserved

◈ CAUTION: Turn off the power before connecting or disconnecting the bill validator.

(6) 6-2
A6 Pin-out Assignments (S.T.D. Pulse for 117V AC)

For the 117V AC version of the A6 bill validator, connect the 30-pin peripheral connector on one end of the harness (***part no. WEL-M008***, see page.12 for pin-out information) to the side of the unit and the 9-pin mating connector to the 117V AC power harness (***part no. WEL-M010 and WEL-M012***, see page.13,14 for pin-out information).

◈ 9-pin mating connector pin-out assignments:



Pin 1 NEUTRAL INHIBIT
Pin 2 NEUTRAL ENABLE
Pin 3 HOT ENABLE
Pin 4 117VAC HOT (Power)
Pin 5 **Earth - Ground**
Pin 6 117VAC NEUTRAL(Power)
Pin 7 CREDIT_RELAY(N.O.)
Pin 8 CREDIT_RELAY (Common)
Pin 9 Reserved

IMPORTANT: On 117V AC units, the Earth Ground must be located inside the machine.

◈ Dual-in-line 30-pin peripheral connector (A6, 117V AC) pin-out assignments:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

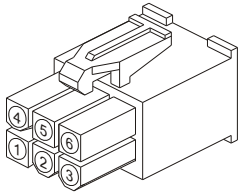
Pin 1 - CREDIT_ RELAY(Common)
Pin 2 - Reserved
Pin 3 - NEUTRAL ENABLE
Pin 4 - 117VAC NEUTRAL(Power)
Pin 5 - NEUTRAL INHIBIT
Pin 6 - KEY
Pin 7 - Reserved
Pin 8 - Reserved
Pin 9 - Reserved
Pin 10 - Reserved
Pin 11 - Reserved
Pin 12 - Reserved
Pin 13 - Reserved
Pin 14 - Reserved
Pin 15 - Reserved
Pin 16 - CREDIT_RELAY(N.O.)
Pin 17 - Reserved
Pin 18 - HOT ENABLE
Pin 19 - KEY
Pin 20 - 117VAC HOT(Power)
Pin 21 - EARTH GROUND
Pin 22 - Reserved
Pin 23 - Reserved
Pin 24 - Reserved
Pin 25 - Reserved
Pin 26 - Reserved
Pin 27 - Reserved
Pin 28 - Reserved
Pin 29 - Reserved
Pin 30 - Reserved

◈ **CAUTION:** Turn off the power before connecting or disconnecting the bill validator.

(7) 7-1
V6 Pin-out Assignments (M.D.B. System for 34V DC)

For the MDB interface V6 bill validator, connect the 30-pin peripheral connector on one end of the harness (***part no. WEL-M006***, see page.10 for pin-out information) to the side of the unit and the standard 6-pin MDB connector to the power/interface connector.

◈ The standard 6-pin MDB connector pin-out assignments:



Pin 1 - 34 VDC
Pin 2 - 34 VDC Power Return
Pin 3 - N/C
Pin 4 - Master Receive
Pin 5 - Master Transmit
Pin 6 - Communications Common

◈ Dual-in-line 30-pin peripheral connector (V6, MDB) pin-out assignments:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

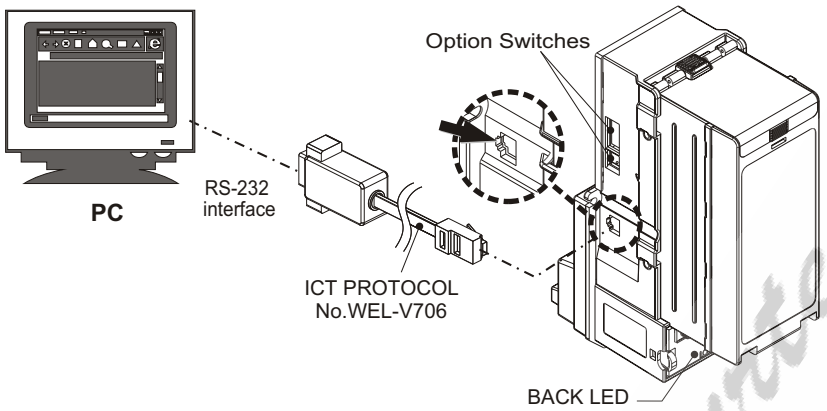
Pin 1 - Reserved
Pin 2 - Reserved.
Pin 3 - Reserved
Pin 4 - Reserved
Pin 5 - KEY
Pin 6 - MDB_MASTER_RXD
Pin 7 - Reserved
Pin 8 - Reserved
Pin 9 - Reserved
Pin 10 - Reserved
Pin 11 - Reserved
Pin 12 - Reserved
Pin 13 - Reserved
Pin 14 - MDB_MASTER_TXD
Pin 15 - Reserved
Pin 16 - 34VDC_RETURN
Pin 17 - Reserved
Pin 18 - Reserved
Pin 19 - Reserved
Pin 20 - Reserved
Pin 21 - KEY
Pin 22 - Reserved
Pin 23 - +34VDC
Pin 24 - Reserved
Pin 25 - Reserved
Pin 26 - Reserved
Pin 27 - Reserved
Pin 28 - MDB_GND
Pin 29 - Reserved
Pin 30 - Reserved

◈ **CAUTION:** Turn off the power before connecting or disconnecting the bill validator.

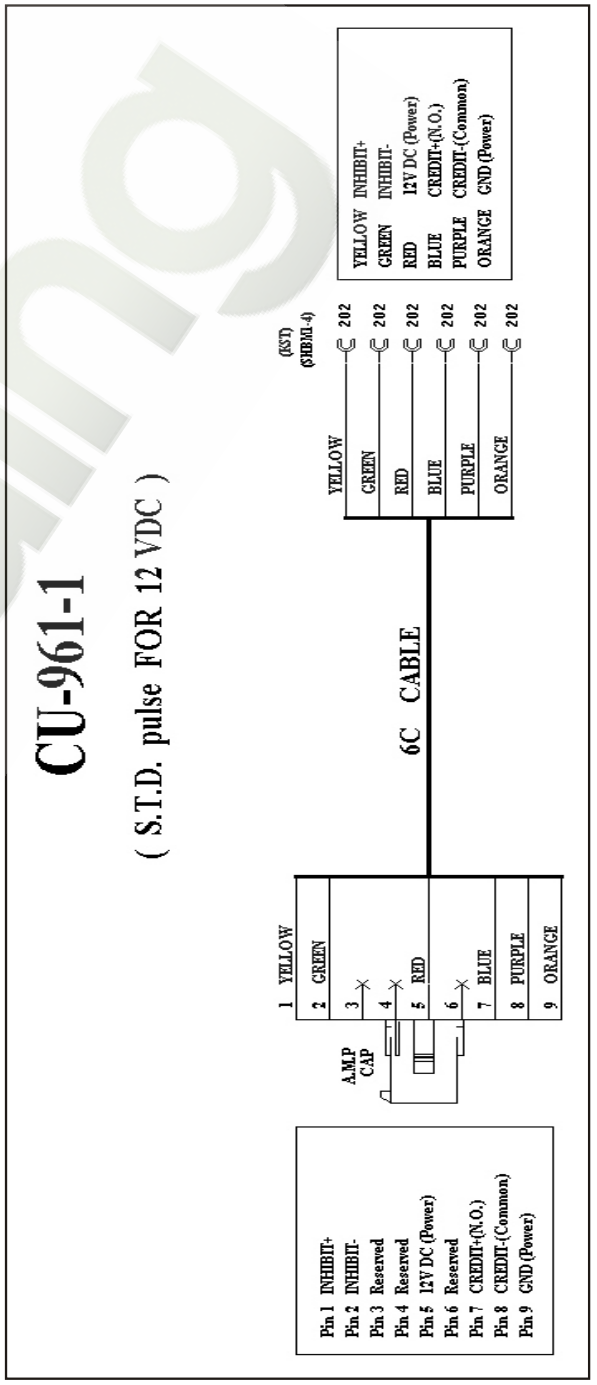
(8) A6 Pin-out Assignments (I.C.T. Protocol)

The cable for ICT Protocol (***part no. WEL-V706***, see page. 17 for pin-out information) connector on one end and a 9-pin PC connector on the other end. To connect, plug the RJ-45 connector into the RJ-45 socket on the side of the BA and connect the 9-pin PC connector to the COM port of a PC (Figure 2).

Figure 2

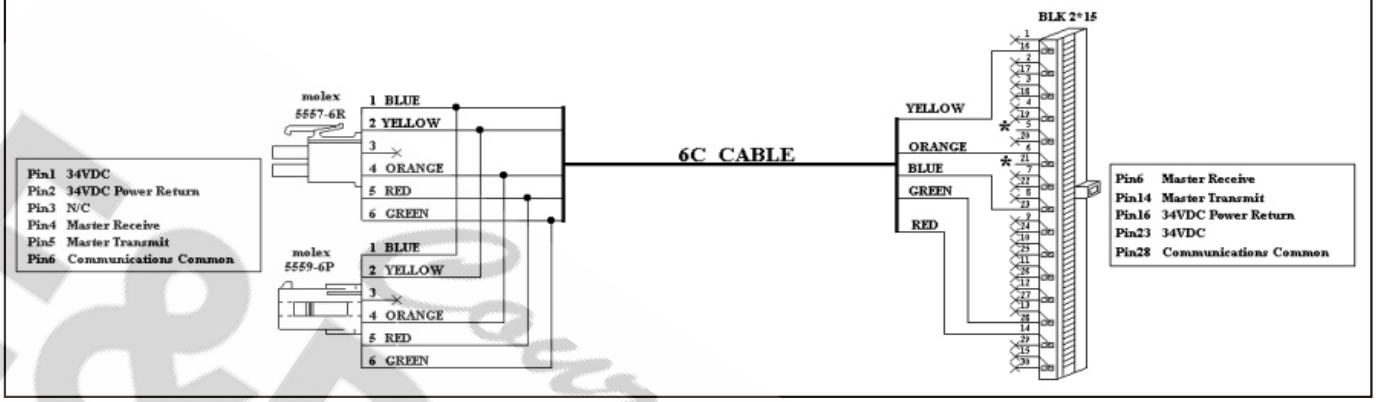


(9) Cable



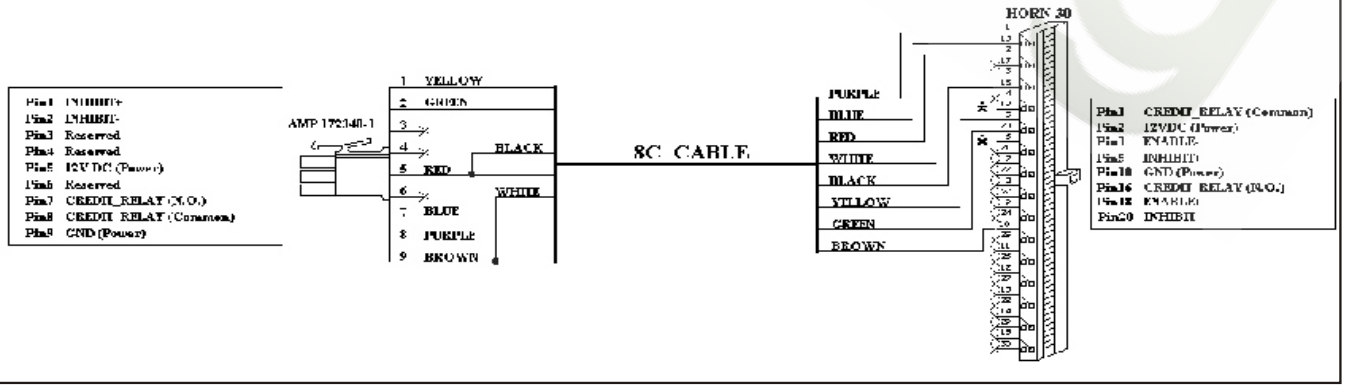
WEL-M006

(M.D.B. System for 34V DC)



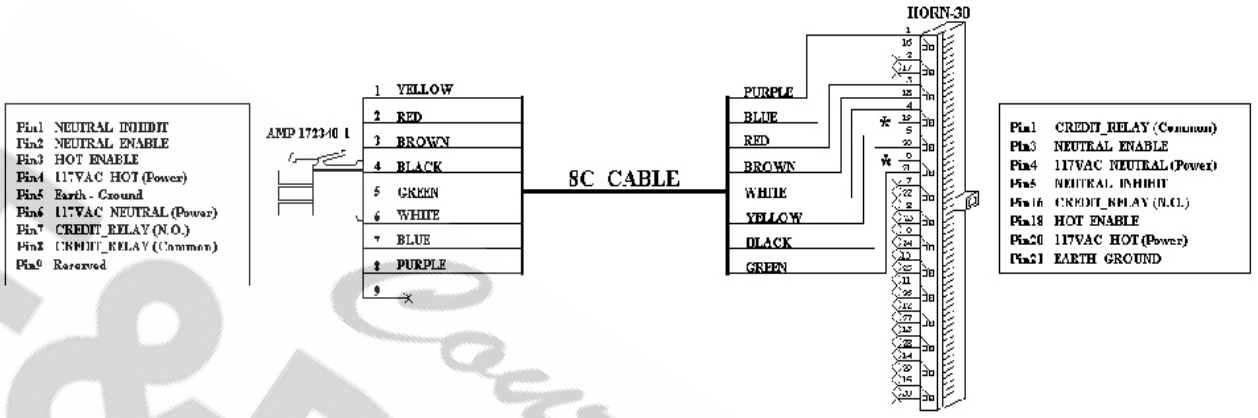
WEL-M007

(S.T.D. Pulse for +12VDC)



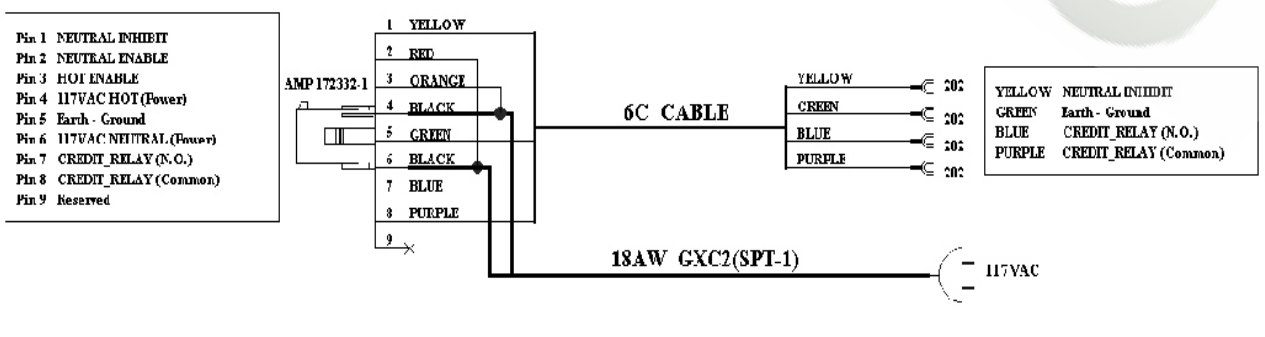
WEL-M008

(S.T.D. Pulse for 117VAC)



WEL-M010

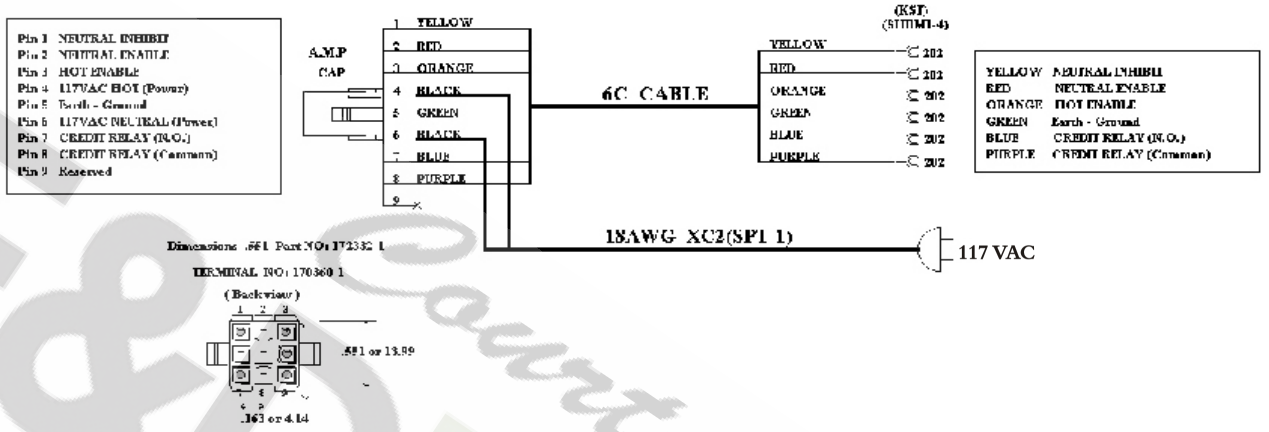
(S.T.D pulse FOR 117 VAC)



(Option)

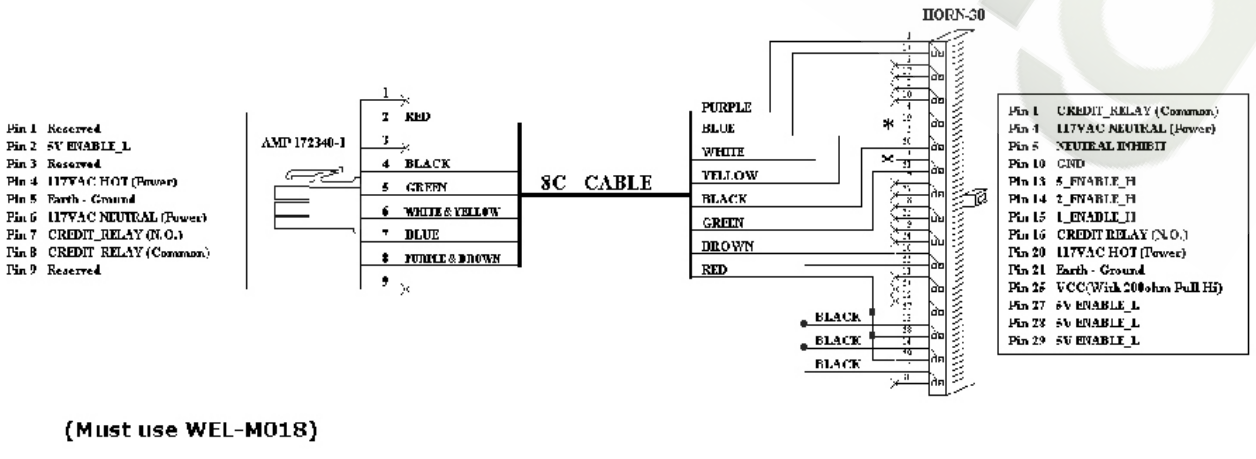
WEL-M012

(S.T.D pulse FOR 117 VAC)



WEL-M017

(S.T.D pulse + 5V ENABLE For 117VAC)



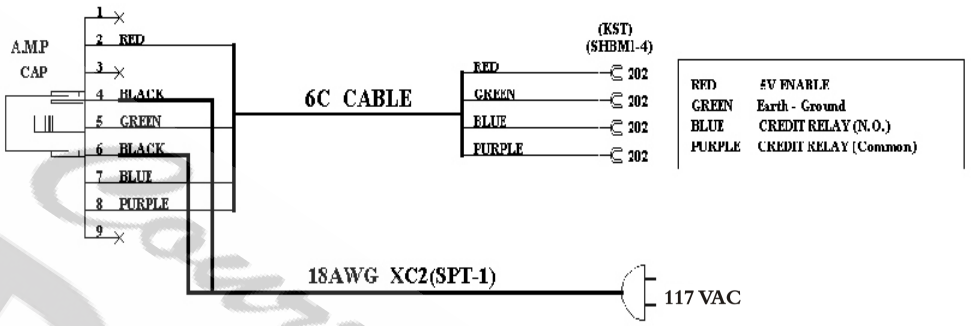
(Must use WEL-M018)

(Option)

WEL-M018

(S.T.D pulse + 5V ENABLE For 117VAC)

Pin 1	Reserved
Pin 2	5V ENABLE
Pin 3	Reserved
Pin 4	117VAC HOT (Power)
Pin 5	Earth - Ground
Pin 6	117VAC NEUTRAL (Power)
Pin 7	CREDIT RELAY (N.O.)
Pin 8	CREDIT RELAY (Common)
Pin 9	Reserved



RED	5V ENABLE
GREEN	Earth - Ground
BLUE	CREDIT RELAY (N.O.)
PURPLE	CREDIT RELAY (Common)

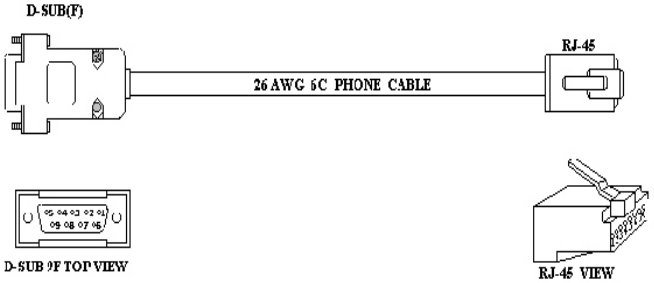
(Must use WEL-MO17)

(Option)

WEL-V706

(I.C.T. Protocol)

Pin 1	X----------Reserved
Pin 2	RXD
Pin 3	TXD
Pin 4	X----------Reserved
Pin 5	GND
Pin 6	X----------Reserved
Pin 7	X----------Reserved
Pin 8	X----------Reserved
Pin 9	X----------Reserved



Pin 1	BLUE---------GND
Pin 2	YELLOW-----TX22
Pin 3	GREEN-------RX22
Pin 5	X----------Reserved
Pin 6	X----------Reserved
Pin 6	RED----------VCC
Pin 7	BLACK--------RX11
Pin 8	WHITE-------TX11