

CRANE Application with DELTA C2000 drive by using its internal PLC features

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Concept

The Hoist Motor's Electromagnetic brake is controlled by the Output Relay of the C2000 drive using brake logic function (logic program made in internal PLC of the drive)

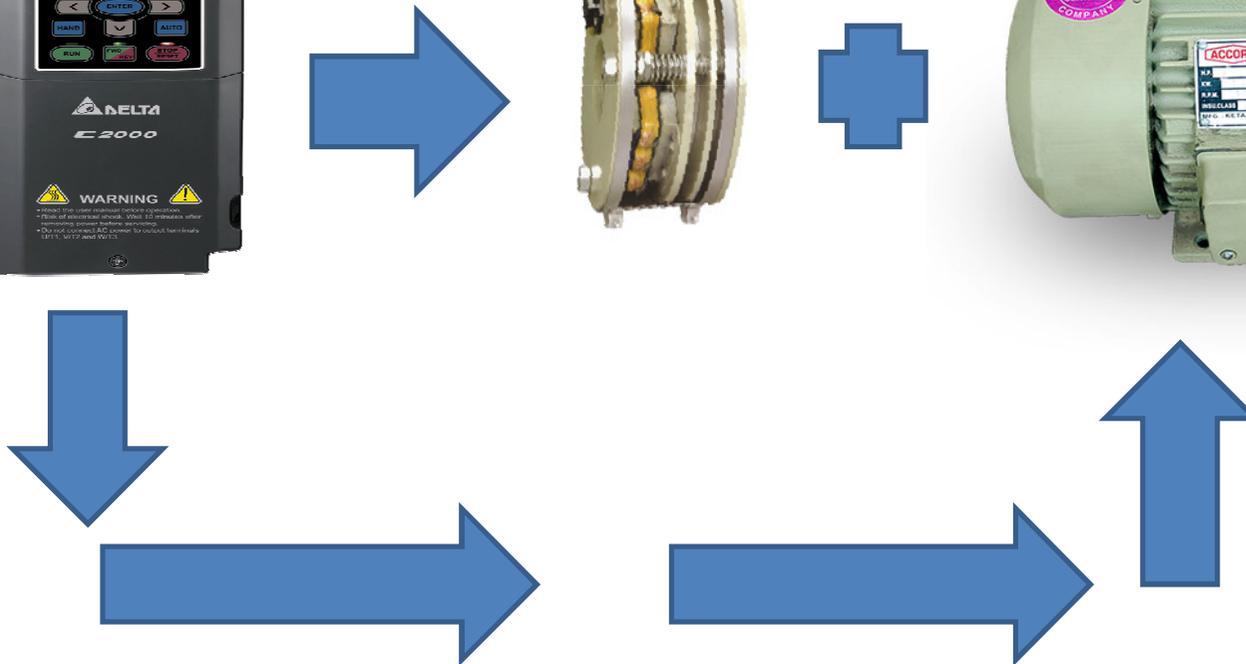
C2000 Drive



Electromagnetic brake



Hoist Motor





Software used

1. WPL Soft – For downloading the brake logic software into the drive's internal PLC
2. TP Editor – For downloading the screen containing brake engage / dis-engage frequency setting and current setting into LCP of drive.



WPLSoft Communication Setting

Select a PLC Model

Program Title
[]

Select VFD-C2000

Communication Setting
RS232 (COM7) [Setting]

File Name
Hoist

OK Cancel

Communication Setting

Connection Setup
Type RS232

Communication Setting
COM Port COM7 ASCII
Data Length 7 RTU (8 bits)
Parity None
Stop Bits 2 [Auto-detect]
Baud Rate 9600 [Default]
Station Address 2

Ethernet Setting
 Assign IP [] []
Port 502

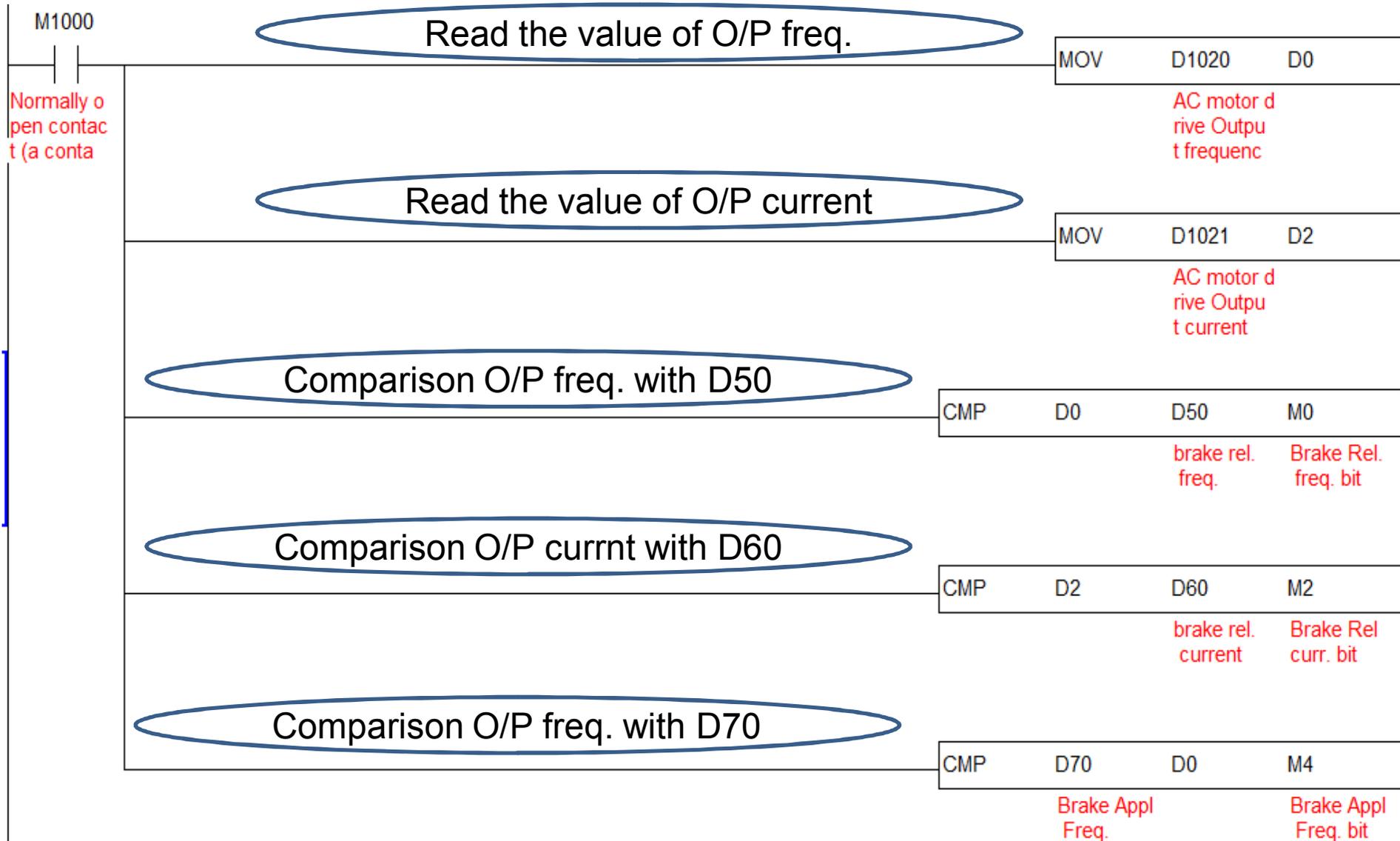
Baud Rate Decided by
 PLC Setting
 WPL Setting

Setup Responding Time
Times of Auto-retry 3
Time Interval of Auto-retry (sec.) 3

OK Cancel

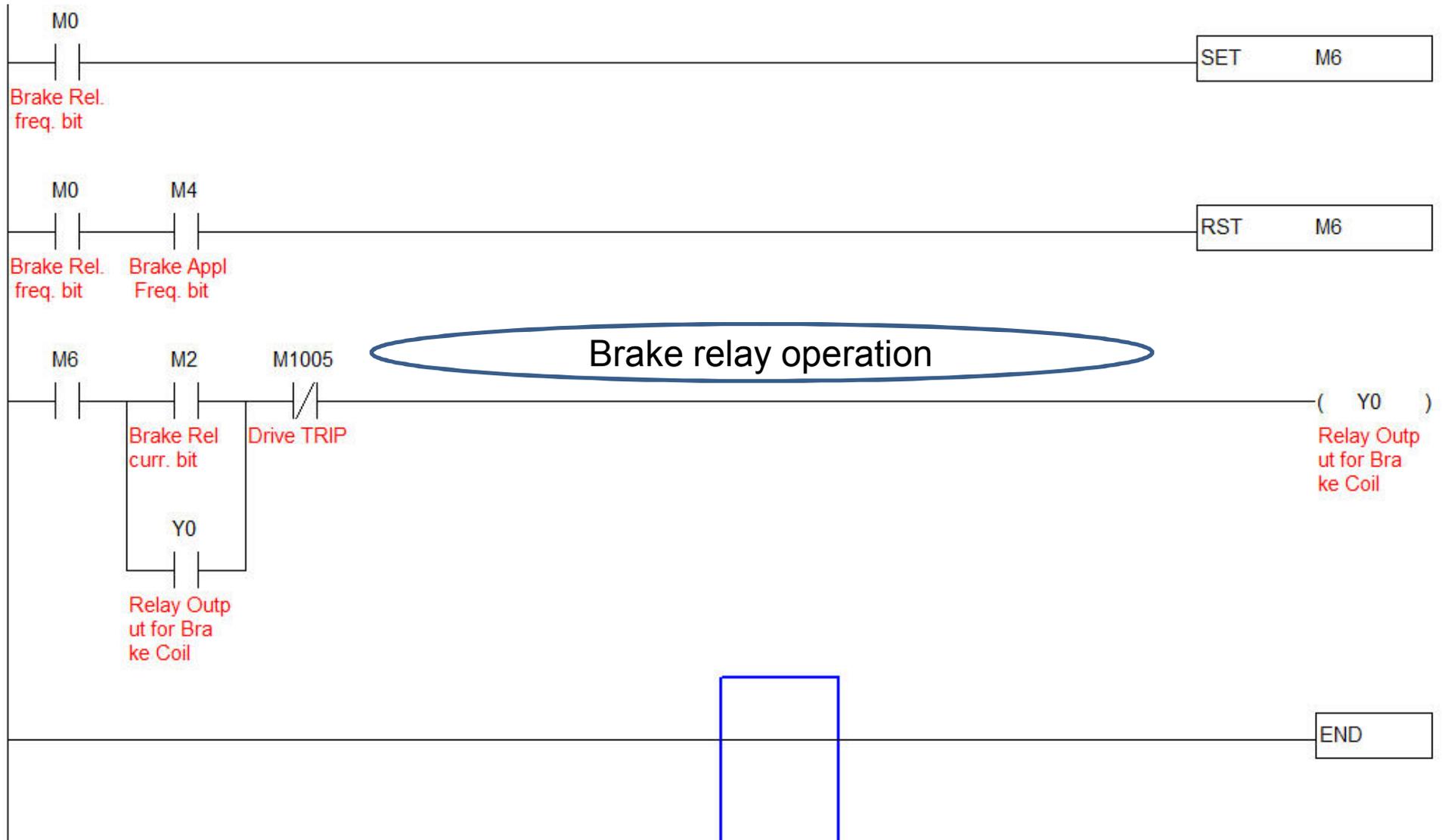


Brake Logic Sequence





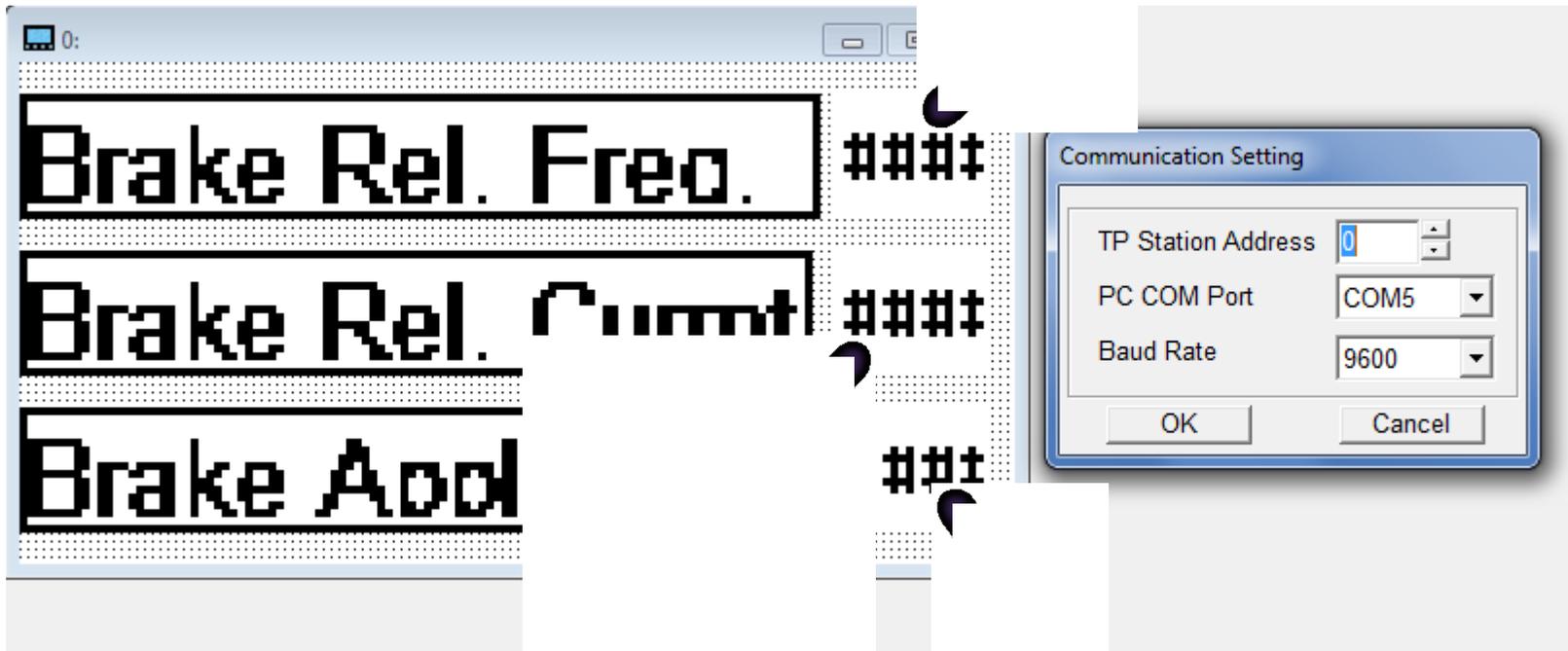
Brake Logic Sequence





TP Editor Communication Setting

D50 = brake release frequency set



D60 = brake release current set

D70 = brake apply frequency set



Devices Required for Downloading

- WPL Soft (C2000) → DVPACAB2A
- TP Editor (LCP Panel) → IFD6530

Note :-

The values of D50, D60 and D70 vary according to the Crane type and load requirement.

Thank you

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please visit www.deltaww.com

