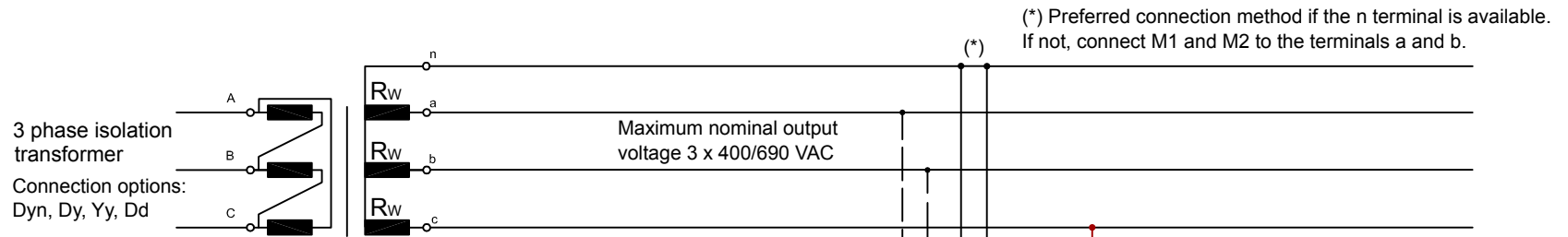


INSULATION SURVEILLANCE SYSTEM IM-01.IND FOR 3 PHASE INDUSTRIAL APPLICATIONS



When M1 and M2 are connected to the n conductor, the 3 phase isolation transformer secondary windings (resistance R_w) are connected between the insulation level measurement of IM-01.IND and the output lines a, b and c.

In normal situation, the insulation resistance between ground (PE) and the output lines a, b and c is almost infinite.

During an insulation fault, the insulation resistance between ground and some of the output lines drops down to finite value R_{FAULT} . Now the insulation level measurement of IM-01.IND sees an insulation resistance which is $R_w + R_{FAULT}$. R_w is typically $< 1 \Omega$ and maximum acceptable R_{FAULT} is typically $> 50 \text{ k}\Omega$.

In other words, the insulation resistance measurement of IM-01.IND sees practically the insulation resistances of all output lines a, b and c connected in parallel. When the insulation resistance of any output line drops down, IM-01.IND notices it and generates an alarm, if necessary.

