Determination of Overall SCCR of Industrial Control Panel UL 508A SB4.4

For each branch circuit, compare the smallest SC rating of all the power circuit components on the load side of the BCPD with the SC rating of the branch circuit protective device. Assign the smaller of the two SC ratings to the line side of the BCPD.

For the isolated secondary circuit of a power transformer as specified in SB4.3.1, the smallest SC rating of all power components on the load side of the transformer shall not be less than the available short circuit current of the transformer. The SCCR of the primary BCPD may be assigned to the line side of the power transformer circuit.

The SCCR of all power circuit components and the branch circuits shall not be less than the available short circuit current specified in SB4.3.2. The line side of the BCPD may be assigned the SC rating of the breaker. All other line side components shall be evaluated as specified in SB4.4.3.

The SCCR of the load side power circuit components and branch circuits shall not be less than the peak let-through current of the fuse. The lower of the short circuit current rating of the fuse or the maximum current used to determine the let-through current from Table SB4.2 shall be assigned to the line side of the fuse. Any other line side components shall be evaluated as specified in SB4.4.3.

The SCCR of the panel shall not exceed the rating of the smallest device or circuit.

For the feeder circuit, the smallest short circuit rating of all branch circuits connected to the source of voltage as determined from SB4.4.1 or SB4.4.2 and any other feeder components shall be determined.

Is the feeder circuit protected by a circuit breaker as defined in SB4.3.2?

Yes

No

Is the feeder circuit protected by a Class CC, G, J, L, RK1, RK5 or T fuse as specified in SB4.3.3?

Yes

No