

Moderate

Assistant Engineer (Electrical), Class 2025

Building Department

In non-circulating current mode dual converters, the circulating current is avoided by

A

Connecting a series reactor

B

Maintaining $I_1 + I_2 = 180$

C

Operating only one converter

Correct

D

Adding an extra SCR

Correct Answer: C

Full Detailed Explanation

Concept & Reasoning: Dual converters provide reversible DC voltage/current using two controlled rectifier bridges. In circulating-current mode both bridges may operate simultaneously and a reactor limits the current caused by instantaneous voltage differences. In non-circulating mode, simultaneous conduction is deliberately prevented; the bridges are alternately enabled. How to Solve It in the Exam: Reactor circulating-current mode; one bridge at a time non-circulating mode. Important Exam Point: Look for interlocking/dead time in practical implementations. Related Revision Path: This question sits in the revision path Power Electronics > Converters > Dual Converters.

Open live question on website:

<https://sarkariresultout.com/pyq/question/gpsc-ae-electrical-q167-non-circulating-current-dual-converter/>