

ANFIS 분류기법을 이용한 부분방전원의 분류

박성희, 윤재훈, 김병철, 임기조, 강성화*

충북대학교, *충청대학교

PD classification by using ANFIS method

seong-Hee PARK, Jae-Hun-YOON, Byong-Chul KIM, Seong-Hwa KANG* and Kee-Jo LIM
ChungBuk Univ, ChungCheong Univ*

Abstract : Solid insulation exposed to voltage is degraded by electrical tree process. And the degradation of the insulation is accelerated by voltage application. For this experimental, specimen of electrical tree model is made by XLPE (cross-linked polyethylene). And the size of the specimen is 7*5*7 mm³. Distance between needle and plane is 2 mm. Voltages applied to acceleration test are ranged 12 to 15 kV. And distribution characteristic of degraded stage is studied too. By PD detecting and data processing, discharge data was acquired from PD detecting system (Biddle instrument). The system presents statistical distribution of phase resolved. Moreover, the processing time of electrical tree is recorded to know the speed of degradation according to voltage. Finally, it's used PD classification by ANFIS method.

Key Words : partial dishcharge, electric tree, ANFIS